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PENINSULAR CALIFORNIA

SOME ACCOUNT OF

THE CLIMATE, SOIL, PRODUCTIONS, AND PRESENT CONDITION CHIEFLY OF THE NORTHERN HALF OF

LOWER CALIFORNIA

BY

CHARLES NORDHOFF

AUTHOR OF

"CALIFORNIA: FOR HEALTH, PLEASURE, AND RESIDENCE" "GOD AND THE FUTURE LIFE"
"POLITICS FOR YOUNG AMERICANS" "CAPE COD AND ALL ALONG SHORE"
"COMMUNISTIC SOCIETIES OF THE UNITED STATES" ETC.

NEW YORK
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1888

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ONE-HUNDRED-AND-THIRTY-YEAR-OLD OLIVE-TREE, SANTA TOMAS.

PREFACE.

I HAVE known the peninsula of Lower California, by conversation with inhabitants and with explorers and those who had grazed cattle in it, and by the study of reports upon it, for many years. In 1881 I made a journey through the upper part of it as far as Todos Santos Bay, which abundantly confirmed all the reports I had heard of its fitness for agriculture, its sufficient water supply, and fine climate.

In the summer of 1887, in the course of a sea-voyage to La Paz, I stopped at Ensenada, and found there the headquarters of an American company which had acquired lands and the right to sell them to foreign colonists and settlers — a privilege formerly denied, but granted under recent liberal laws of Mexico. As I had for many years desired to own land in the Peninsula, being convinced of the excellence of the country and climate, I selected and bought a small tract on and near the bay of Todos Santos.

When this little purchase of mine became known, I received numerous letters from acquaintances and strangers in different parts of the United States, asking me the grounds of my belief that Lower California is a desirable region, and inquiring also about the security of land titles and the character of the laws and government. I have concluded to publish what I know about

the Peninsula; and as before I paid for my land I made a careful and thorough examination of the International Company's franchises and charters, I have added, at the end of my little book, the results of that examination also.

When I published my book on California, sixteen years ago—in 1872—I was generally believed to have over-estimated the resources of that State. The event has shown that I really under-estimated them greatly. California, rich as I believed it, is far richer than I reported it, as everybody now knows. My knowledge of our own State has, I think, enabled me to form a just estimate of the resources of the peninsula south of it. It is a region as superficially known as was the State of California when I made my exploration of it in 1871. The northern half, of which I treat in this book, is essentially a part of our own southern California, and will, I believe, some day be found to be as fruitful and as valuable as that.

The map which accompanies this volume is made up from various sources—old explorations, the recent surveys of the International Company, and, as to the coasts, from the careful surveys made during several years by United States vessels, the *Ranger* chiefly, under orders of the Hydrographic Office of the Navy Department. The charts of the Peninsula and the western coast of Mexico, made by the Hydrographic Bureau from these surveys, are very full and accurate, and, as to the southern half of the Peninsula, afford almost all that is actually known of its area.

CHARLES NORDHOFF.

July, 1888.

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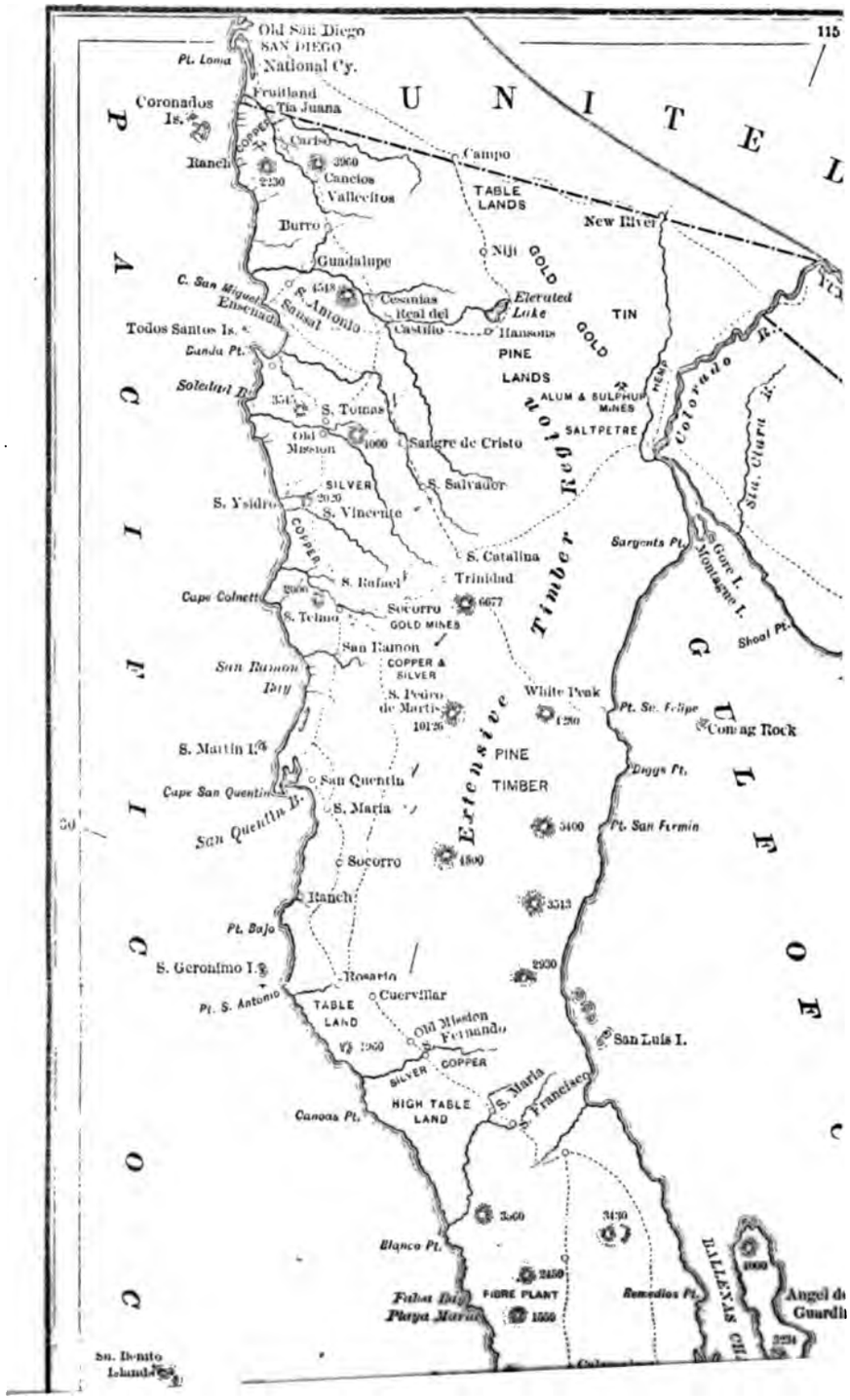
Old San Diego
SAN DIEGO
National C'y.
Pt. Loma
Fruitland
Tia Juana
Coronados Is.
Copper
Carlsbad
Campo
Ranch
2230
3960
Cancios
Vallecitos
TABLE LANDS
New River
Burro
Niji
GOLD
Gundalupe
C. San Miguel
Encenada
4518
S. Antonio
Cosanias
Real del Castillo
Elevated Lake
TIN
GOLD
Todos Santos Is.
Hansons
PINE LANDS
Punta Pt.
Soledad B.
3540
S. Tomas
ALUM & SULPHUR MINES
HEMP
SALTPETRE
Old Mission
4000
Sangre de Cristo
S. Salvador
SILVER
2020
S. Ysidro
S. Vincente
COPPER
S. Catalina
Trinidad
Sargents Pt.
Gore I.
Montague I.
S. Rafael
Cape Colnett
2500
S. Telmo
6677
Socorro
GOLD MINES
Shoal Pt.
San Ramon
San Ramon Bay
COPPER & SILVER
S. Pedro de Martir
10126
White Peak
1280
Pt. St. Felipe
Comag Rock
S. Martin I.
PINE
TIMBER
Diggs Pt.
San Quentin
Cape San Quentin
S. Maria
San Quentin B.
5400
Pt. San Fermin
Socorro
4800
Ranch
3513
Pt. Bajo
2930
S. Geronimo I.
Rosario
Cuervillar
Pt. S. Antonio
TABLE LAND
1960
Old Mission Fernando
San Luis I.
SILVER
COPPER
S. Maria
HIGH TABLE LAND
Canoas Pt.
S. Francisco
3460
3430
Blanco Pt.
2450
FIBRE PLANT
1550
Remedios Pt.
BALLENAS CH.
1900
Angel de Guardia
San Benito Islands
Colorado R.
Sta. Clara R.
Timber Region
Extensive
GULF OF CALIFORNIA
UNITED
115
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PENINSULAR CALIFORNIA.

CHAPTER I.

HISTORICAL SUMMARY OF THE PENINSULA.

THE Peninsula called Lower California stretches, as will be seen on the map, from Cape St. Lucas in the south, in latitude 22° 40′, to the United States boundary, in latitude 32° 40′. It was first visited by Europeans in 1533, a vessel under the orders of Cortez discovering and entering a bay on the Gulf coast, supposed to have been the present La Paz. Cortez himself visited the Peninsula in 1533, anchoring in the bay of La Paz, where, one hundred and seventy-five years later, in 1710, another famous character, Alexander Selkirk, then sailing-master of the *Dover*, one of Woodes Rogers's fleet, also lay to refit. Selkirk had been taken by the *Dover* from the island of Juan Fernandez.

After Cortez, a considerable number of Spanish expeditions were sent to the Peninsula. Their misfortune was that they landed on the driest, hottest, and most stormy coasts, those on the Gulf side, and on the southern extension of the long land-spit. The earlier missionary efforts were made also in this region; and all the

early Spanish efforts at colonization and the reduction of the country were induced mainly by the richness of the pearl-fisheries about La Paz and Ceralbo Island on the Gulf coast. The English expeditions, which landed at various points on the coast, were chiefly sent out to capture Spanish galleons coming towards Mexico from Manila, and later as explorers, for geographical purposes.

Early in the present century a number of American traders visited the Peninsula, drawn thither by reports of the great abundance of fur seal; and several of them made extraordinarily profitable voyages. The fur seal were, however, very soon driven away or exterminated, and they are now very rare on the coasts and islands. After the settlement of Upper California, American whalemen, for many years, visited the bays and lagoons south of latitude 29°, which were frequented by great numbers of whales; but these also were either exterminated or driven off, and that business ceased to pay twenty years ago.

The reputed richness of the Peninsula in minerals caused many adventurers, some with capital, others only prospectors, to try their fortunes in it; but with few exceptions these also were unsuccessful. Mining operations are of late systematically prosecuted at several points in the extreme southern section; and north of La Paz, on the Gulf side, there are gold and silver deposits, some until lately owned by a rather notorious character, the late Mrs. E. Burdell Cunningham, which have been reputed valuable. No great fortunes have so far been made in mining in Lower California.

Recently, however, under the stimulus of rapid development and settlement, there have been important mineral discoveries in the northern part of the peninsula, gold being found in paying quantities over a considerable area whose southern limit is within a hundred miles of the United States boundary line. Reports on these new mining discoveries, which have recently appeared in an excellent journal, *The Lower Californian*, published at Ensenada, and in California newspapers, will be found in an appendix.

On the Gulf coast there are large deposits of sulphur, owned by the International Company of Mexico, and for the working of which preparations are making. In the Gulf, north of La Paz, lies also one of the largest and most accessible salt deposits known in the world —on Carmen Island. This is managed by Mr. James Viosca, of La Paz, an American, and United States Consul at that place. On the Pacific coast at San Quintin, the International Company own a salt deposit as rich as that of Carmen Island, which will soon be developed. With the rapid increase of mining operations in the western states of Mexico, both the sulphur and salt deposits will prove very valuable.

The following list of the missions of Lower California, compiled by Taylor, shows that the Jesuits, who began the Christianization of the Peninsula, adhered to the earlier mistake, in confining their attempts to the southern half and to the Gulf side. They thus attacked that part only which is of least value, except for pearls and mines.

"1. The Mission of Nuestra Señora de Loreto, founded by Father José Marie Salvatierra, October, 1697, in latitude 29° 30′, on the Gulf side.

"2. Dolores del Sur, by Father Salvatierra, January, 1699, in latitude 24° 30′, on the Gulf side.

"3. San Francisco de Vigge, by Father Francisco M. Piccoli, March, 1699, in latitude 25° 30′, in the interior, towards the Gulf.

"4. Santa Rosalia de Moliege, by Father Juan M. Basualda, in 1705, in latitude 26° 50′, on the Gulf side.

"5. San José Commander, by Father Julian de Mayorga, in 1708, in latitude 26°, on the Gulf side.

"6. La Purisima Concepcion, by Father Nicolas Tamaral, in 1718, in latitude 26°, in the interior.

"7. Nuestra Señora de Guadalupe, by Father Juan Ugarte and Everhard Helen, in 1721, in latitude 27°, on the Pacific.

"8. San Ignacio de Kadakman, by Father Juan B. Luyando, in 1728, in latitude 28°, on the Pacific.

"9. N. S. de Dolores del Norte, in latitude 29°, was made as an adjunct to San Ignacio, but a few years afterwards seems to have been absorbed into this last and abandoned, as were two or three pioneer foundations of the same kind, before 1740.

"10. San José del Cabo, founded by Father Nicolas Tamaral, in 1730, in latitude 23°.

"11. Mission of Todos Santos in the South, founded as an adjunct to San José, about the year 1737, and formerly called Santa Rosa, in latitude 23°, on the Pacific.

"12. Mission of Santa Gertrudis, founded by Father

DON LUIS AGUILAR'S ANCIENT APRICOT ORCHARD.

DON LUIS AGUILAR'S ANCIENT APRICOT ORCHARD.

Fernando Consag, in 1751, in latitude 29°, on the Gulf side.

"13. Mission of San Francisco Borja [pronounced Borca], founded by Padre Wenceslao Link, in 1762, in latitude 29°, on the Gulf side.

"14. Mission of Santa Maria, in the vicinity of the bay of Los Angeles, on the Gulf, founded by Father Victoriano Arnes, in 1767, in latitude 31°."

Of these fourteen Jesuit missions it will be observed that only three were placed on or near the Pacific, and none of them north of 28°. In 1768 the Franciscans, under Father Junipero Serra, succeeded the Jesuits, and they fostered the already established missions, and founded one new one, that of—

"15. San Fernando Villacatta, in 1769, in latitude 31°, in the interior."

The remaining seven Lower California missions were founded by the Dominicans; and all but one on the Pacific side:

"16. El Rosario, near the bay of Los Virgenes, on the Pacific, in 1774, in latitude 30° 25′, about fifty miles northwest from San Fernando Villacatta.

"17. Santo Domingo, near San Quintin Bay, and twenty leagues north from Rosario, in 1775, in latitude 30° 52′.

"18. San Vicente Ferrer, twenty leagues north from San Domingo, in latitude 31° 30′.

"19. Santo Tomas, near the bay of Todos Santos, the next above San Vicente, in 1790, in latitude 31° 52′, about forty miles above San Vicente.

"20. San Pedro Martyr, about forty miles east of Santo

Tomas, in the mountains, on the 28th day of May, 1794, by Father Cayetano Pallos, in latitude 31° 50′.

"21. San Miguel, of the frontiers, some thirty miles south of San Diego, in 1782, by Father Tomas Valdellon and Miguel Lopez, in about latitude 32° 10′.

"22. Santa Catalina de los Yumas, about fifty miles east from Santo Tomas, in the mountains, by Father José Lorient, on the 18th of May, 1797, in about latitude 31° 20′. Santa Catalina was the last mission founded in Lower California."

It appears that the Indians were numerous and very troublesome for many years in the northern half of the Peninsula; and as the mission fathers had no armed force to protect them, their progress northward, particularly on the Ocean side, was made difficult. The topography of the Peninsula, which becomes very mountainous north of latitude 29°, also impeded their operations. The old roads then made show that they were thus troubled. In 1790, when the mission of Santo Tomas was founded, "the Indians were very troublesome to manage." Since then they have almost entirely disappeared in the northern district. The disestablishment of the missions here, as in Upper California, tended to the speedy extinction of the race.

In 1842 the Mexican Congress admitted two delegates from the two Californias, on a basis of somewhat over thirty-three thousand population for both, of which twelve thousand were credited to Lower, and the remainder to Upper California. During the Mexican War United States troops occupied the Peninsula, and a con-

siderable number of the principal inhabitants, who had favored annexation to the United States, left the territory when the American troops evacuated it. When gold was discovered in Upper California a large migration to the gold-fields still further emptied the northern part of the Peninsula.

In the "Geografia de la Republica Mexicana" of Mr. Antonio Garcia Cubas, published in 1874, the total population of Lower California is given at 23,195, of which only 6125 were credited to the northern part, above latitude 29°. In fact, it was considerably less in 1880, the pursuits of mining and the pearl-fishery, and the difficulty of getting away to other countries, having barely maintained the population of the southern end, the most populous part lying between the latitude of La Paz and Cape St. Lucas.

Politically, the Peninsula is a Territory, not a State, of the Mexican republic. It has two capitals, La Paz in the south, and Ensenada in the north; and two governors, appointed by the Federal authority as governors of Territories are appointed with us. The great length of the Peninsula, and the difficulty of passing through this length, has made necessary its division into these two districts. There is no territorial legislature; the few Government employés are paid out of the Federal treasury, and with the exception of customs duties there are no taxes, except for local improvements. There are, therefore, no "politics" in this quiet land. The Government requires the inhabitants to obey the laws and keep the peace, and large powers are given to the governors

to maintain order and punish violence. At La Paz there is a small force of troops; at Ensenada the Governor had until recently under his control a police force of fifteen mounted men, well armed and active, who were sufficient for all purposes.

The rapid and considerable increase in population around Todos Santos Bay and in other parts of the territory possessed and being settled by the International Company has led the Federal Government, for the protection and security of settlers, to make Ensenada, the capital, a full company post, establishing there a picked company of one hundred soldiers, commanded by officers carefully selected for their standing in the military school, which is the West Point of Mexico.

CHAPTER II.

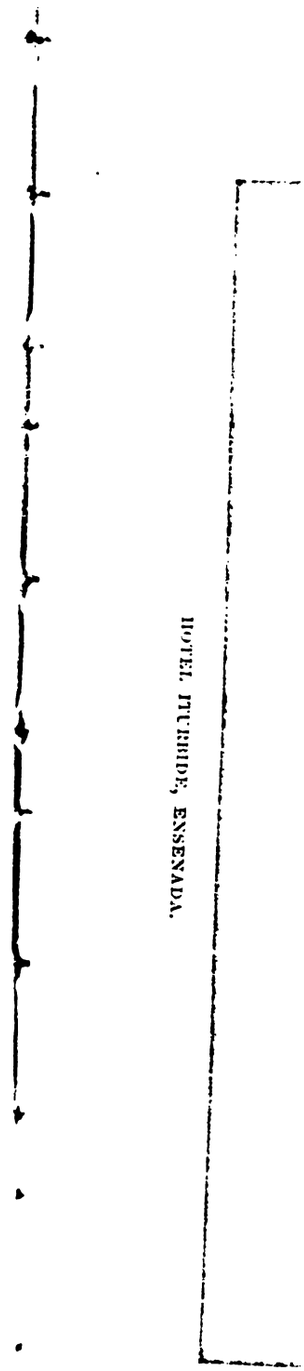
WHY THE PENINSULA WAS REPUTED A DESERT.

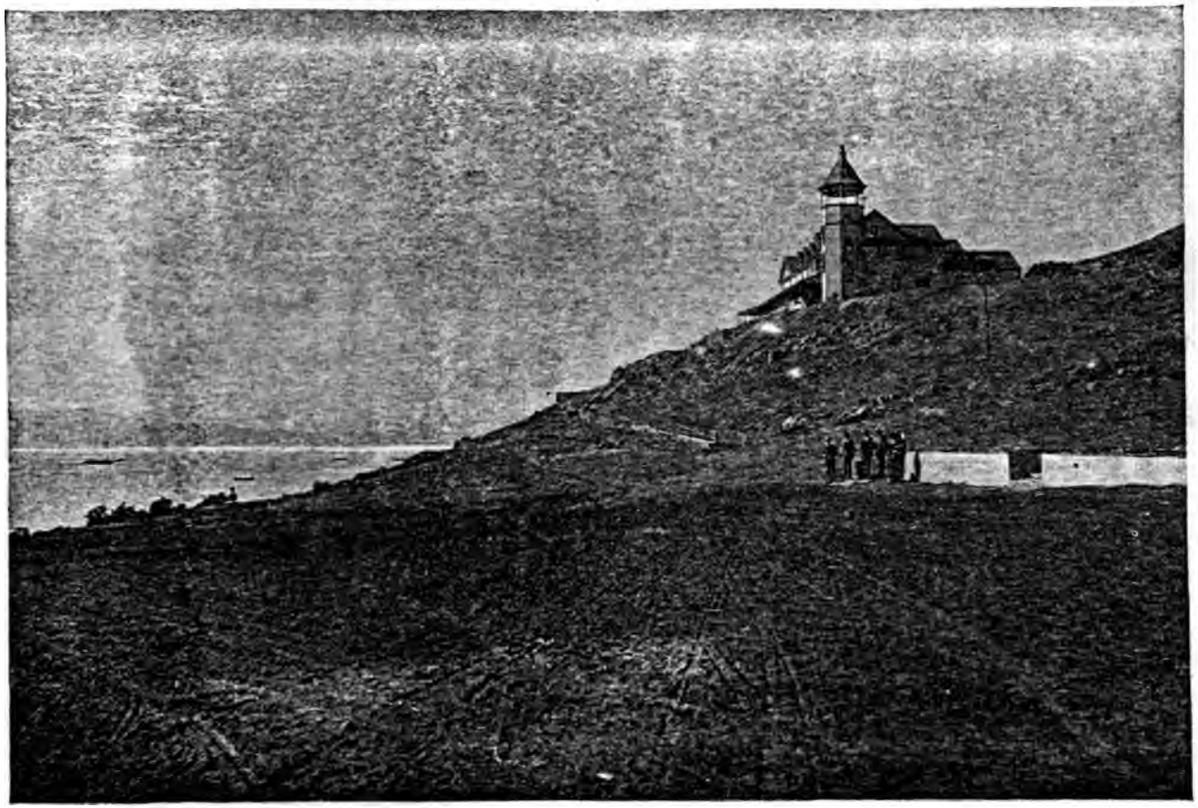
WITH the exception of New Guinea, Lower California was until recently one of the least known parts of the world. Very thinly inhabited except in the extreme southern part, examined in its whole length and breadth by not more than one or two men capable of making an intelligent report on it, so mountainous and uninhabited in the northern half that — as I know by experience — travelling was extremely difficult there from lack of supplies and good roads, Lower California, having got the reputation of being a desert, attracted no general attention or even curiosity. Mining prospectors examined parts of it from time to time, and failed to find the rich deposits they hoped for. Land speculators got grants of parts of it from the Mexican Government, but broke down, because they planted colonies only on the sterile southern half. Until the International Company secured its grants in the northern half of the Peninsula this part was avoided by speculators of all kinds, who were attracted to the south because there the richest mineral deposits were reported to be, and there also are the broad plains which were mistakenly supposed to be most capable of colonization. The mountainous char-

acter of the northern district concealed its agricultural wealth from mere speculators. It required the actual explorations and surveys made by the International Company to reveal the extent and value of this section.

Thus the whole Peninsula has long been regarded as a desert because only its worst parts were known, and these even but little known. It does contain in the middle and southern parts a considerable sterile area. There are, according to Ross Browne and other travellers, extensive plains in the southern district, curiously covered with rocks and loose stones, and really desert. In other portions of the southern half of the Peninsula there are, again, broad plains having a fertile soil, and as Ross Browne, its only careful explorer, reported, water attainable by digging wells. But most of these southern plains, which are below the limits of the International Company, lie in the rainless zone. The water which Ross Browne found everywhere, even in this arid region, underlying the soil is of course the drainage of the mountain range which runs the whole length of the Peninsula.

The various attempts at colonization have been, with one or two exceptions, made in the southern half of the Peninsula, and their failure naturally gave the whole of Lower California a bad name. But even these attempts failed mainly because they were, in every case so far as I know, mere speculative adventures, carried on without intelligence and with no purpose to establish agriculture, but either as mere mining enterprises or with the design to unload on settlers as quickly as possible. Ross





HOTEL ITURBIDE, ENSENADA.

Browne, who traversed the whole Peninsula from Cape St. Lucas to the United States boundary, in 1867, in the employ of the Lower California Company, one of these colonization schemes, gives a vivid description of such a speculative settlement which he saw in that year:

"We struck inland a mile or two below Santa Maria. Approaching the place, our eyes were gladdened by the sight of two or three very American-looking board houses and a well-cleared piece of road, broad and smooth as a race-track. What was our surprise, on riding up to the house, to find a couple of sign-boards on one corner, one bearing the inscription 'Hyde Street,' the other 'Barry Street!' Without knowing it, we had stumbled on an embryo American town. We were met at the door by an elderly man, whose name we afterwards learned was Porter. He welcomed us cordially, showed us where to put our baggage and saddles, directed the men where to find pasture for the mules, and took us in, treating us with the greatest hospitality. We remained over the next day, and learned that the proposed city of Santa Maria was a speculation of a Judge Hyde, of San Francisco, based on the problematical event of his being able to make this the terminus of the best road across the mountains to the Colorado. A large sum of money had been spent here, and all that remained to show for it were two good houses and one very poor one, a few hundred yards of useless road running nowhere over a plain, a corral, and a little vegetable garden. The port is so small and shallow that the little vessel of eight or ten tons that comes here occasionally has difficulty in pass-

ing the bar; the plain on which the future city is to be built is too salt to admit of cultivation, and is subject to overflows when, as last winter, it is covered with half a foot or more of water; firewood there is none, except a scanty supply of willow, and the general resources of the region are just *nil*. There is excellent grass on the plains, especially among the willows and near the hills, and the water, which is very good, is reached by wells of from three to twelve feet deep."

Here were grass and good water easily accessible, Mr. Browne reports, but no effort made at real settlement by farmers. Santa Maria City was evidently the merest speculation; a proposed terminus for a proposed railroad which never got further than being proposed.

Every such failure has, of course, given the whole Peninsula a black eye, although not more than one or two even of these futile attempts, so far as I know, were made in that northern part which the International Company of Mexico controls, and which is now opened to settlement.

The last of these failed colonizing attempts was that of the Lower California Company, in 1868–70. Their grant extended from the latitude of La Paz in the south to San Quintin in the north, and they chose for their first settlement perhaps the least promising part of this great area—the section about Magdalena Bay, a large part of which is really sterile. The colonists who were sent there by the company were laborers with no means, who were told that to collect orchilla, a parasitic plant used in dyeing, would give them a living. They

found it did not, and some perished on the spot; the rest got back to Upper California, telling truly that they had been misled into a hopeless enterprise. The company seem to have been discouraged by this failure, and, so far as I know, made no further efforts. As they did not fulfil the conditions on which they received their large grant, the Mexican Government in due time, and in a legal manner, formally declared it forfeited.

CHAPTER III.

NATURAL WEALTH, CLIMATE, SOIL, TIMBER, WATER, ETC.

THE grant of the International Company begins a little south of the northern limit of the extinct Lower California Company, and extends north to the United States boundary line. It covers a region almost the whole of which possesses a totally different character from that farther south. While more mountainous than our Upper California, or than the part of the Peninsula to the south, and therefore containing a less proportion of arable lands, it has numerous valleys, mesas, and hill-slopes as rich as the best of Upper California, with, as will be found by settlers, as large an average rainfall as San Diego or San Bernardino County, and as large a number, in proportion, of streams available for irrigation.* I do not believe that irrigation will be *more* necessary in these valleys than it is in San Diego, Los Angeles, and San Bernardino counties. Grain crops are grown as successfully without irrigation in the valleys of northern Lower California, wherever men have tried, as in the counties I have named.

This change in the character of the northern part of

* Tables of temperature, rainfall, etc., will be found in an appendix.

LIVE-OAKS, LA GRULLA.

the Peninsula has struck every traveller. It is due mainly to the fact that the high mountain ranges in the north affect the climate favorably, and also gather and store waters for the streams. In his "Historical Summary of Lower California, from its Discovery in 1532 to 1867," Alexander S. Taylor, a well-known Californian, says on this point:

"As the vicinities of the bay of Viscaino are reached, and after passing the parallel of 28°, the mountain system begins to rapidly rise from four thousand feet to the elevation of perpetual snow, which it appears to attain opposite the mission of San Fernando, and which from several accounts it seems to carry until near the mission of Santa Catalina. These snowy peaks (for it is only on the highest peaks snow is seen) must be over twelve thousand feet high, as they are reported to be covered with snow in the spring and early summer by Kino in 1702, Link in 1765, and by Patie in 1827; but these Nevadas have never been laid down geographically correct in the two or three old maps of the Jesuits; indeed, they are not laid down on any we have seen dated after 1830. In their vicinity is stated to be a large mountain lake which feeds the various small streams north of Viscaino Bay.

"It is the melting of the snows on this range which makes the northern part of the Peninsula so much better and more fertile than the southern districts, or even better than our sections between San Diego and San Bernardino."

That there is a striking change and improvement in

the climate, soil, and watering of the Peninsula, as the traveller proceeds northward, is attested by all observers. Ross Browne, for instance, writes:

"Having passed Rosario, we were told to expect a great improvement in the country. The rocky tracts were to disappear, and beautiful valleys to take their place. Of a truth, there was a great change; but Rosario is rather an arbitrary point. San Quintin would be a nearer approximation to the truth."

He goes on to describe the country he saw about San Quintin:

"About San Quintin the pasture was exactly like that of Upper California in its best condition. Alfileria, alfalfa, burr and red clovers make the greater part of the forage plants, while the yellow poppy, primrose, and other familiar flowers complete the resemblance. In fact, the belt from here to Rosario may be laid down as the dividing line between the semitropical floras of the lower peninsula and the more northern vegetation of Upper California. Many species of cactus disappear soon after leaving Rosario, as well as a large number of other plants with which we had become familiar; and of those which do continue, a large number cling tenaciously to the mountains or highlands, and are even there scattered and thinning out. On the other hand, we had noticed for more than a week, one after another of our northern friends coming in, first scattered, stunted, and evidently away from home, but gradually increasing in number and size, almost insensibly but none the less surely supplanting their southern neighbors. This overlapping of

forms takes place much more markedly in the high land than in the plains. In the latter the vegetation is much more sectional; that is, it resembles much more closely the district to which it belongs.

"As an illustration, an Upper Californian, suddenly transported to San Quintin, would have no special reason to suppose himself out of his State; while if he were placed on the mountains directly east or north-east he would find the same plants that make the characteristic landscape about San Borja, or even farther south. Two or three miles from San Quintin we saw the last cardon, or columnar cactus; and in the line of demarcation which I had laid down we encountered the first buckeyes and elders. Chaparral oaks make their appearance between this point and San Telmo, and the hills support, for the first time, a scattering growth of chamiso. The ceanothus, with its little bunches of purplish flowers, appears about the same time.

"On the 10th we rode along the coast half a dozen leagues, *over good grazing lands*, to San Ramon, where we camped aside of a marshy arroyo, under shelter of a clump of willows. A quarter of a mile from us was a house, the headquarters of a ranchero. The people here are engaged in raising horses, of which we saw several bands. The animals are of good size, fine-looking beasts, and their condition spoke well for the character of the pasture."

Proceeding northward from San Quintin, Browne continues:

"Leaving San Ramon, we followed the coast four

leagues farther over a similar country to that behind us, and then our road took us four leagues across a range of pretty high hills to San Telmo, a little settlement near a deserted and ruined mission, in a deep valley. Everything bore the impress of an approach to Upper California. Large herds of sleek, nice-looking cows were grazing on the flats and lying under the shade of the trees; while several flocks of sheep could be seen dotting the hill-sides, or huddled together in some shady spot, under the care of a drowsy shepherd, whose more vigilant dog would rush at us with furious barking, trying to drive us away from his charge."

He goes on with his journal:

"In the afternoon we rode across a rolling granite country three leagues to the old mission of San Vicente, where, the next day being Sunday, we remained until Monday morning. Our camp was one of the most beautiful I ever beheld. We were on a perfectly level tract of a few acres, nearly shut in by a grand old hedge of prickly-pear; the whole area was covered with a mat of the greenest grass. Back of us was a table ten or fifteen feet high, on which stood the not unpicturesque ruins of the mission buildings; at our side was a fine stream of water, and overhead the dense foliage of a clump of venerable olive-trees, in the midst of which we had made our camp. The mules luxuriated in the rich, juicy herbage, and we enjoyed the beauties of the place to the fullest, leaving it with regret when Monday morning reminded us that we could idle no longer.

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fertile bottom-land, and a considerable tract of grazing-land, on the low, rolling hills. A large portion of the bottom seems to have been cultivated during the time of the missions, judging from the remains of irrigating ditches winding around the hill-sides. Let American enterprise wake these people out of their lethargy, and San Vicente will become one of the most flourishing ranches of Lower California.

"From San Vicente we rode inland seven leagues to Santo Tomas, through a rolling, rocky country, with plenty of water. This latter place is in the bottom of a wide arroyo, twenty-one miles from the coast. It is quite a town, of some perhaps fifty or sixty inhabitants, containing half a dozen houses and the ruins of the small mission establishment. A few acres of ground are under cultivation, irrigated by the water of three or four large springs. This is the headquarters of the subgovernment of the frontiers. Señor Zerega, the deputy-governor, to whom we had letters, was absent, but we were very well received by the family of a brother-in-law of our guide. A group of old olive-trees, here surpassing in size even those of San Vicente, are almost the only traces of early cultivation of the vicinity. The valley is said to be excellent ranch-land for some distance further up, and all the way to the coast. Some cattle and sheep are raised here, and considerable quantities of wine are produced." This was in 1867.

In the summer of 1849 a party of American gold-seekers, travelling by sea from Panama to California in a New Granadian schooner of about twenty-three tons,

were shipwrecked near Point Domingo, on the southern coast of the Peninsula, and six persons of this party determined to make their way by land to San Diego. It proved a long and severe journey, made in the dry season, of which Mr. J. D. Hawley published his journal—a record of much suffering. He also notices the change from the southern sterile and unfriendly region to one farther north, where, whenever they could find a ranch, they received supplies and were comfortably entertained; and it is about Rosario that (as he also notes) this change began. His journal reports, for instance:

"*Monday, September* 24*th.*—From San Rafael we passed over an uneven but fair road for four and a half leagues, when we arrived at the Ranch El Salado, owned by a cousin of our guide, Don Nicolas, and brother of our first guide from San José de Grace to San Ignacio—Juan José—and we received a cordial welcome. At present the ranch is only for grazing, but Señor Marie, the proprietor, is now busy making adobes for a new house, and he intends to bring in a stream of water for irrigation; this will enable him to raise all kinds of fruits and vegetables. The valley is quite extensive, and the soil appears to be good. We spent the entire day at El Salado, and we are to exchange two of our mules for two horses.

"*Tuesday, September* 25*th.*—Did not get an early start, as our two horses did not come in till about twelve o'clock. At two we started and rode to San Vicente, [illegible] and a half leagues, an excellent ranch."

Under date of September 29th he writes:

"We have passed through immense fields of wild oats and mustard, where large numbers of horses and cattle are grazing. The Indians about here are represented as very troublesome."

Compare these accounts of travellers and explorers with the following, which I extract from the Ensenada *Lower Californian* of April 19, 1888, and it will be seen that they did not exaggerate:

"A friend at Sauzal sends us a sheaf of wild oats which measures four feet in length and hangs full of grain. These oats grow wild, and immense fields of them go to waste for want of stock to eat them.

"Charles Bennett showed us the other day a twig six inches in length, cut from a plum-tree in his Maneadero orchard, on which were eight full-grown plums. The tree has been set out just one year. This growth was not exceptional. Other fruit-trees in his orchard presented the same wonderful productiveness. If there had ever been any reason to doubt that fruit-trees would do well in that valley, Mr. Bennett's orchard settles the question beyond all controversy.

"We understand the wheat harvest is coming on in the Maneadero and other valleys in this vicinity, some grain having already been cut. By next week, probably, the wheat harvest will be on in earnest. The yield will be large, and the quality equal to any raised on the Pacific coast, or, for that matter, in the world."

And this account of San Ysidrio, a newly developed region south of Santo Tomas:

"*To the Editor of the Lower Californian:*

"All the resident farmers here are pushing forward their clearing and planting operations, and any one who has not visited our place since the first sod was turned, some three months ago, would be surprised to see what the progress has been in that short period. We have six resident families engaged in farming, two more who have land under crop and whose ulterior intentions are unknown, and eight others who have bought land on our mesa with the view of settling and cultivating in the autumn. Others farming at some distance have bespoken land on the town site to build upon for residence.

"The chief attractions of our place are the healthfulness and beauty of its location on the Pacific Ocean, fifty-four miles from Ensenada, its equable climate and invigorating breezes, the natural protection of our landing making it the inlet and outlet for considerable back country business, the mineral wealth of the neighborhood, good soil, abundant fuel, cheap Indian labor, and water abundant in quantity and unsurpassed in quality.

"One of our farmers has new potatoes fit to dig, while all have a growth more or less promising of hay, corn, and other farm and garden produce. Vines and fruit-trees have been set out by some, and others are now at work at it.

"The Ensenada and San Quintin steamer calls once a week."

The Indians have long ago ceased to be troublesome;

AMONG THE PINES IN THE MOUNTAINS.

they have almost totally disappeared, and the few who remain are a docile laboring force.

The Spanish rancheros of San Diego and Los Angeles counties knew the northern part of Lower California more intimately than any one else. Some of them had relatives living in that country, and most of them had travelled in it. I knew several of these in 1871–72, all of whom asserted to me positively that the northern part of the Peninsula, as far down as below Rosario, so far from being the desert it was commonly reputed to be, was fertile, beautiful, fairly well watered, and as rich as Upper California. Their testimony, which was unanimous and positive, first induced me to think of owning property down there, and led me to study the region in reports and other publications—very few in number they are—and to visit it in 1881. Don Juan Foster, one of the largest land and cattle owners in San Diego County, told me first, what was confirmed by others, that in seasons of severe drought, when his and other owners' cattle were starving, they were accustomed to drive them across the border into Lower California, where they were sure to find abundance of feed, and, of course, water, for cattle cannot live without water. This I find also confirmed in a letter of Charles D. Poston, written so long ago as 1866, in which he says:

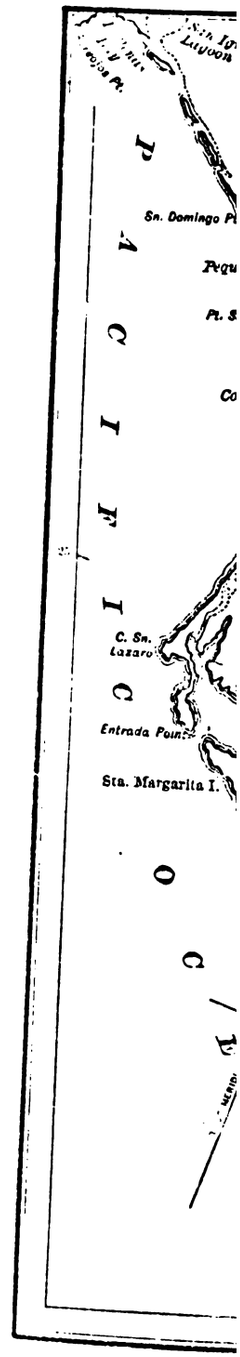
"For grazing cattle, horses, sheep, and goats, Lower California is, in some respects, superior to Upper California; and I have personally known, in seasons of great drought, the cattle and horses from Los Angeles

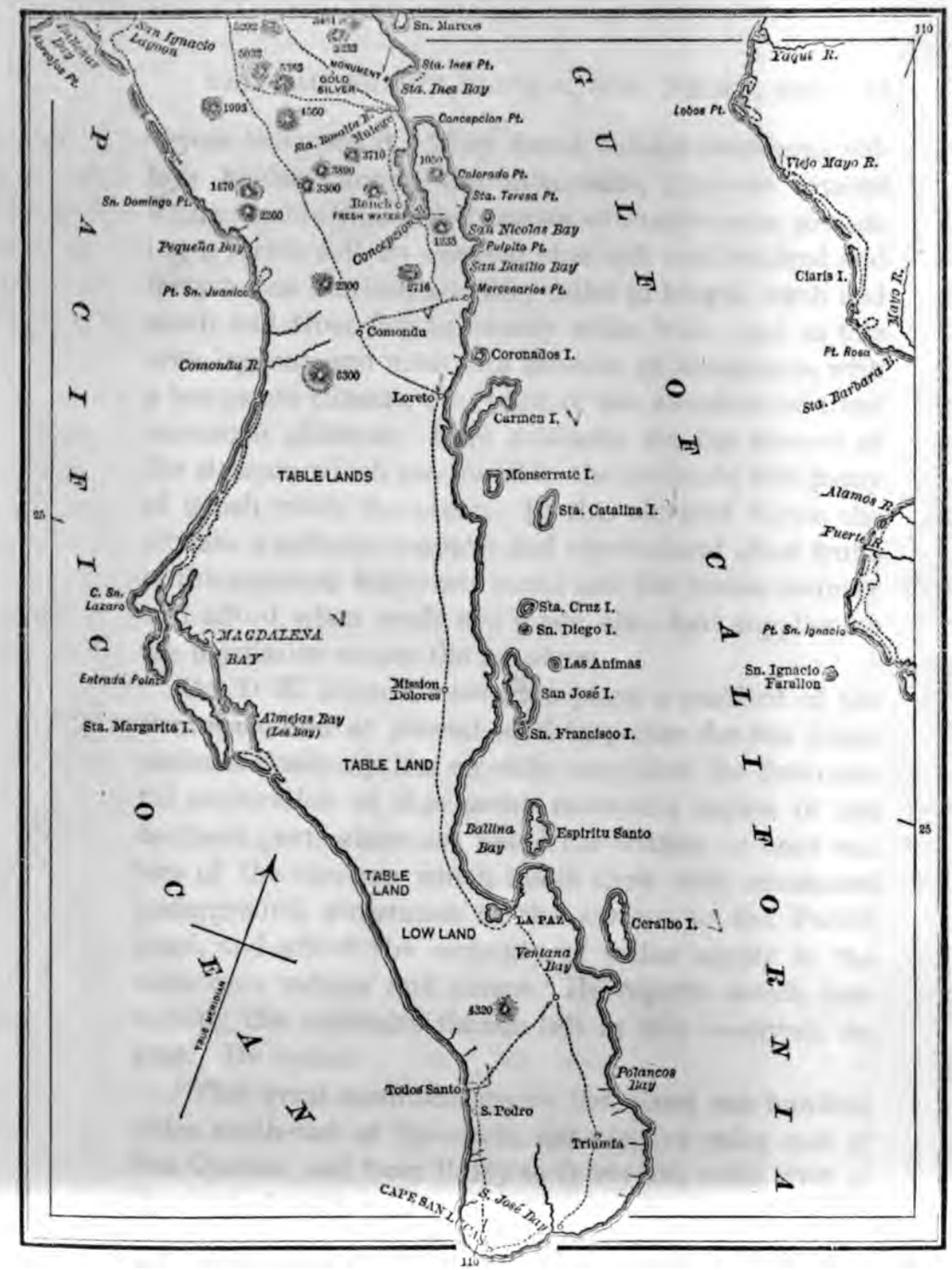
and San Diego to be driven to Lower California to save them from perishing."

Taylor quotes, to the same effect, a book I have never been fortunate enough to see—the account of the northern part of the Peninsula, by James O. Patie. He says of Patie:

"The first American who visited this section of the Peninsula from the east, or indeed the first white man, was James O. Patie, as long ago as March, 1827. He was taken, with his father and a party of distressed beaver-hunters, by a squad of soldiers at the mission of Santa Catalina, whence they travelled to San Vicente and then up the coast to Santo Tomas, San Miguel, and San Diego, at which place they were all put in prison by General Echeandia, the first Mexican governor of the two Californias. In his book, Patie says this part of the coast contains large quantities of fertile land, and the padres had excellent vineyards, gardens, and orchards of all kinds of fruits, grains, and vegetables, and feasted the travellers on good wines, fruits, and viands. Some four thousand Indians were seen in Santa Catalina, San Vicente, Santo Tomas, and San Miguel. These parts were covered with bands of cattle by the thousand, and in Santo Tomas alone the padres had thirty thousand sheep."

The accounts thus given by intelligent explorers and travellers refer only to the most easily accessible parts of the Peninsula, those on or adjacent to the sea-shore. The large interior of the northern part was never thoroughly explored until the International Company's sur-





PENINSULAR CALIFORNIA—SOUTHERN HALF.

veyors traversed it. They found, besides numerous valleys hidden among the mountains, plateaus covered with valuable timber and grasses, extensive areas possessing a fertile soil, an elevated pine belt one hundred and forty to one hundred and fifty miles in length north and south, and from five to twenty miles wide; and in this area lagoons and mountain streams in abundance, with a temperate climate, the result of the elevation of these mountain plateaus. Here evidently are the sources of the streams which are found in the lowlands, and many of which reach the ocean. In this elevated region the climate is suitable to apples and cherries and other fruits of the northern temperate zone; and the timber country will afford, when roads are made, abundant supplies for the population nearer the sea-shore.

Col. D. K. Allen, for over ten years a resident of the Peninsula, and at present land inspector for the International Company, has recently completed the first careful exploration of this great mountain region of the northern part, where are found the sources or head waters of the streams which make their way, sometimes underground, sometimes at the surface, to the Pacific coast, and afford the certainty of water supply to the numerous valleys and plains. He reports details concerning the extensive timber belt in this mountain region. He writes:

"This great mountain region lies about one hundred miles south-east of Ensenada, seventy-five miles east of San Quintin, and from thirty to thirty-five miles west of the Gulf of California.

"The mountain, for there is really but one, is about one hundred and ten miles in length, and from fifteen to thirty in width. The great range, of which San Pedro is the crown, is about one hundred and sixty miles long and from twenty to forty wide. The highest portion of the mountain on the west is eleven thousand eight hundred feet above the sea, while the eastern portion, or that next to the Gulf, rises to twelve thousand eight hundred feet, and is covered with the very best of pine timber. The Palomas—three peaks at the extreme east—rise from one thousand two hundred to one thousand five hundred feet still higher. These are perfectly white, though the cañons on the sides are filled with pine.

"The highest altitude reached by my party was twelve thousand eight hundred feet at three different points. I spent seventy-six days and travelled over one thousand five hundred miles in my examination of that region. We visited every valley, climbed every mountain peak, followed every stream from its head to its point of union with streams that led to the sea. Water is abundant everywhere, and only has to be husbanded in order to furnish a great supply for all the lands on the north end of the Peninsula. These streams can be easily and cheaply dammed, and all of the pine can be put into them and floated down to the heads of the valleys. This can be done with the San Rafael, which is a grand stream with five large branches, draining nearly all of the north end of San Pedro; also with the San Domingo, which drains the western side of the mountain, and the logs or timber can be taken out at the upper end of San

Rafael Valley near Colnett, or at the upper end of San Quintin Valley near San Ramon. Either water route is perfectly feasible.

"The pasture was the finest I ever saw on the Pacific coast. Wild oats, rye, red-top, clover, bunch grass, buffalo, gramma, and many other grasses were knee-high to our mules. There was only one man—an Indian—living within thirty miles of the mountain. He was milking sixty cows, and making butter and cheese, which he sold at the mining camps at Socorro and Valledares, at San Telmo and San Quintin.

"Much of the surface of the mountain is level as a plain, and one can drive a pair of horses and buggy for miles just where he chooses among the pines. Other portions are almost inaccessible. The soil is excellent. The valleys of La Grulla, Santo Tomas, Santa Roex Old Mission, Old Corral, Vallecitos, Valle de los Caballos, are all beautiful and good.

"The great area of the mountain is about one million acres, one-half of which is covered with good pine, cedar, and fir. I measured fifty-four acres, taken carefully as an average of the timber, and found that there were twenty-five large and fifteen small trees to the acre. The large trees averaged three logs each, twelve feet long, two and one-half feet in diameter. On the fifty-four acres I found only one hundred and sixty-five dead trees, of which one hundred and seven were lying on the ground. Two of these latter had recently fallen. I found one which measured one hundred and eighty feet in length, eight feet in diameter at the butt, and sixty-

five feet to the first limb, where it was five and one-half feet in diameter. I measured a number of fir and red cedar trees that were twenty-five, and even twenty-seven feet in circumference, eighteen inches above the ground.

"With a railroad, which is feasible, that body of pine is worth many millions of dollars. The Yuma Railroad will pass within thirty miles of the northern end of the pine region, the best portion, and a track can be built up to the pines, or to some one of the streams, and the logs can be driven down the stream as is done in many places in Wisconsin and Michigan. This water held in reserve to run the logs can be utilized in irrigating the valleys below.

"Game was very abundant; black and white tail and moose deer by the hundreds. Antelope are plenty on the mesas south and east, and in the great valley of San Felipe, which, by-the-way, will become one of the gardens of Lower California. It is an immense body of good land; hot as Yuma, but for all that good. Mountain sheep are abundant at the southern end, near Rosarito.

"The water and snow fall is immense. It rained five times in June, fifteen in July, seventeen in August, and sixteen in September. More than thirty inches of water fell. On the 10th and 11th of September six and one-tenth inches of water fell. On the 19th of the same month, in San Felipe Valley, three inches fell in four hours. The thunder was very heavy, the lightning sharp. Four weeks ago there was ten feet of snow on

San Pedro. This accounts for the permanent water in all of the streams from Ensenada to the southward, and for the mild, pleasant climate of summer all along the coast."

Further details of this important timber country will be found in an appendix.

The Peninsula is undoubtedly rich in minerals, but its great development in this direction can come only with a denser population. In the southern part a number of profitable mining enterprises are on foot at this time. The Triumfo silver-mines, south-west of La Paz, are in English hands. Near latitude 27° on the Gulf side, the Santa Rosalia and Poleo copper-mines are worked by a French company under control of the Paris Rothschilds. This company has expended several millions on its works, town, and a railroad; and the mines are considered very rich. There are at several points on the Peninsula considerable placer and quartz deposits, promising well, and there have been lately discoveries of copper deposits in the northern part, believed to be as rich as those on the Gulf coast above spoken of. The "color" of gold can be got in almost every gulch and ravine on the Peninsula; and when the mineral resources are better known it will probably be found that the Peninsula's formation is but an extension of the great northern California gold-field.

Concerning the healthfulness of the climate of the northern part of the Peninsula, all the accounts, from those of the early missionaries down, concur, and with enthusiastic praise. Taylor, whom I have before quoted,

does not misrepresent the universal testimony when he writes:

"The climate of the country *between the boundary and Magdalena Bay* is one of the most delightful, salubrious, and equable on the face of the globe, and, if settled, this region would be among the most accessible and acceptable sanitariums in the world, and is admirably adapted to raising many of the fruits of the torrid zone, and all of those of the Mediterranean basin as well as all the vegetables and cereals of Alta California; and all agree that they are of much better quality than those raised above San Diego."

He adds, what is very true, that on the Gulf of California the summers are extremely hot, "torrid" as he rightly says. Again he writes:

"The climate, from its proximity to the sea, is not only extremely salubrious, the people enjoying uncommonly good health, and being long livers, but the atmosphere is extremely fine, pleasant, and invigorating, and seldom troubled with cold summer fogs and winds; these facts are well known since 1770, the testimony of travellers and seamen being uniform.

"The missionaries, after 1730, introduced the Arabian date-palm, which succeeds admirably, and yields abundantly, and also oranges, lemons, and all the species citrine family, pineapples, bananas, also planted the vine, olive, fig, peach, quince, and even plums watermelons, and such like, in m

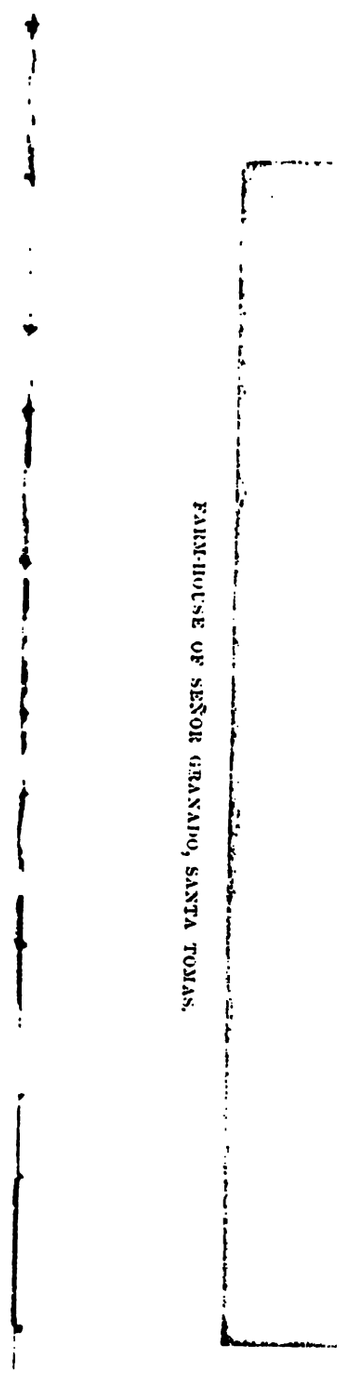
quince, and peach are more luscious, and grow much quicker, and with less labor and expense, than in Alta California, and in many localities are unsurpassed in the world for luxuriance, sweetness, and flavor. The fig and grape are much sweeter than in our State, and the grape ripens quicker and better, from hotter and drier suns, and makes much richer wine, brandy, raisins, and currants. Before 1849 the Lower Californians sent up annually to Monterey large quantities of dried figs, currants, grapes, dates, and peaches, and cheese also, where they were sold at reasonable rates and good profits.

"There is much good land near the missions of Rosario, San Vicente, Santo Domingo, and Santo Tomas; several permanent streams and a number of coast lagoons furnish abundance of excellent water for animals and irrigation, exceedingly abundant and easily taken. The orange, lemon, banana, date-plum, grape, fig, olive, almond, peach, pomegranate, quince, arrive at maturity much earlier than farther north, in the United States."

CHAPTER IV.

THE PENINSULA AND CALIFORNIA COMPARED.

IF these accounts of Lower California are not gross exaggerations, it will reasonably be said, Why is it that this region, adjoining our own California, has lain so long waste? One cause is the immense area of unoccupied, singularly rich, and until lately very cheap lands in California, having also a climate remarkably healthful and pleasant, and so wide a variety of products that their full extent is not even yet known. Another is that Lower California is Mexican, a foreign land, and, as I have said before, a singularly unexplored region. But the main cause is found in the Mexican laws, which, until they were modified some years ago, rigorously forbade Americans, and all foreigners in fact, to own real estate within sixty miles of the boundary line and within three leagues from the sea-shore. The Peninsula is narrow, and these laws worked as total an exclusion of settlers from abroad as though a Chinese wall had been built across the boundary line. Aside from these causes, there were also others, such as the failure of experiments in colonization, and, even more important, the difficulty for individual purchasers, without great expense of time and money, to ascertain the boundaries of



occupied ranches, the soundness of titles, and the location of public lands in a region which has never been surveyed.

The International Company began its operations by making a complete survey of the northern part of the Peninsula. This was the first of the conditions on which it received its grant. It thus ascertained accurately which were the public lands, of which by survey and purchase it became the owner, and at the same time, of course, marked the precise boundaries of such lands as were by good titles in private ownership, most of which latter lands the company has since bought. Thus by the company's labors this region was for the first time properly opened to possible settlement. Until this work was done, no lines could be definitely ascertained.

Having made its surveys, the International Company is able to fix boundaries accurately, and by the conditions of its grant is able to give sound and indisputable title-deeds to the lands it sells. These titles are in the form of warrantee deeds of the company, confirmed in every case by the Mexican Government in the manner of a United States land patent. By a special clause in the company's grant, these titles to lands it sells to settlers are made unassailable, even in the contingency that the company should fail to fulfil some of the conditions of the grant. In that case (which is, however, no longer possible, as it has actually fulfilled all the conditions except that of settling two thousand families, for which it has ten years from September, 1887) it is provided that while the company shall forfeit its unsold lands, those actually sold to settlers shall be undisputed.

Under the act of Congress known as the "Colonization Law," the Mexican President was authorized by Congress to make grants of public lands to companies on condition of survey and settlement; the object being to secure the disposal of the public lands not to speculators to be held in great tracts, but for the settlement of agriculturists, to populate the vacant parts of the republic. Thus the opening of the northern half of Lower California became for the first time possible.

In any case, the experience of the last thirty years has pretty well dissipated the "desert" superstition. Old men remember very well when Texas was believed to be a desert waste. I have myself, within twenty years, talked with Californians who refused to believe that their State could ever support a population "after mining was played out;" and when I wrote my book on that State in 1871–72, describing its natural fertility and foretelling its great and various development, Californians for the most part believed and said I had grossly overrated the richness of their State. Little more than ten years ago New Mexico and Arizona were popularly believed to be deserts, fit at best only in spots to run cattle on; and the vast central plain, which has now nearly half a million of farmers, stands in the geographies of twenty-five years ago as "the great American desert."

It required thirty years—from 1848 to 1878—to develop even in part the singular and wonderful agricultural wealth of California; and in my belief, not more than the half is known yet. I have myself seen a section of that State which in 1873 was declared, by a sheep-man with

whom I camped, to be so sterile a desert that he could not feed a band of two thousand sheep on a hundred thousand acres of it, and he was then actually driving them off. When I saw this region again, in 1881, it was green with alfalfa and covered with all kinds of fruit-trees—apples already in bearing—and the land was thought cheap, and was cheap, at one hundred dollars per acre. Such experiences, of which I have known a dozen, show me that the cry of "desert" is nonsense.

I travelled in 1881 over a part of the Peninsula where I could not for any money buy feed for my horses; and in the very same region I saw last year corn from fifteen to seventeen feet high, at least half the stalks bearing from two to three ears—full, large ears, such as would delight an Illinois farmer—and near by, the stubble of a large wheat-field, which showed that an excellent crop had been taken off; and all this with no irrigation whatever. American energy and enterprise, and American ploughs, had brought about this change on the Peninsula, just as they have done in Upper California.

That the country is healthful is so well established that it is needless to assert it; all who have lived in it or travelled through it have proclaimed the peculiar excellence of the climate of the northern half of the Peninsula. Like our own southern California, it affords every degree of climate—cool on the mountains, on the highest of which snow falls every year; cool also on the seashore, and a dry heat in the interior valleys.

Both the summer and winter climates of the sea-

shore of the northern part of the Peninsula will be found peculiarly kindly and favorable to persons with weak lungs or weak constitutions — more favorable, in my belief, than any part of the southern California sea-shore, unless it be Santa Barbara and San Diego. More favorable because more equable. There are less daily extremes of temperature; the nights are cool but not cold, and the days are warm, but in my experience scarcely ever hot. I wore winter flannels in August on the shores of Lower California, with light summer clothing; and a more charming and more salubrious and invigorating climate than is found on the shores of Todos Santos Bay, and as far down as San Quintin, no one need wish. The time will come when almost every harbor within these limits will be a favorite resort both for summer and winter tourists and invalids. The scenery is enchanting, and the value to persons in tender health of the sea-shore climate of the Peninsula will be acknowledged, and will make that coast famous as soon as good hotels are ready to receive such persons, and competent physicians have been drawn thither to report on it. In an appendix will be found valuable records of temperature at Ensenada, kept for two years by an expert observer, which tell their own story.

The questions the farmer asks are: Is the soil fertile? Is the climate healthful? Is it adapted to the growth of the most valuable crops? Does the region promise sufficient water for the necessities of agriculture?

To all these questions my answer is "Yes." The soil of the valleys and mesas is as rich as any in the world.

The climate is as various as any one can ask; for the settler may go to a mountain-side high enough to grow apples, or into valleys where he may grow date-palms, bananas, and the citrous fruits. He has as large a choice as in Southern California, and in my belief he will have a larger. There is no doubt that the date can be grown as a safe and profitable crop; the banana will grow as a crop wherever the farmer has shelter and water; though I do not believe this tender and large-leaved plant will flourish on the sea-shore. It needs shelter almost everywhere. Whether the cocoanut palm will thrive seems to me doubtful. It is not now found, at any rate, on the Peninsula north of La Paz, but there it does well. I think it may be discovered by-and-by that in the northern half of the Peninsula lies the true home of the olive; and I have no doubt that the climate is peculiarly well suited to the Madeira grape, which may, in the hands of enterprising Americans, find a new home and fresh vigor on the virgin soil of the Peninsula. For some years to come Lower California will be a place for experiments in agriculture and horticulture, just as for twenty years past Upper California has variously and surprisingly rewarded intelligent experiment in its different sections. And it must be borne in mind that the farmer on the Peninsula will have the inestimable benefit of all the knowledge of methods of cultivation, adaptability of soil and situations to plants, use of water, etc.—of all that has been learned in these matters in the last thirty years by the farmers, orchardists, and vine-growers of our own California. How

great the gain and advantage are in this respect, those know who have seen how much our Eastern farmers had to learn when they went upon California lands, and through what years of patient and costly experiment they secured the knowledge which is now open to every settler on the Peninsula.

As to water for irrigation, there is every reason to believe that with proper management there will be abundance. The fact that a number of old olive orchards, notably that of Santo Tomas, have survived the neglect of the greater part of a century, and that the grape and the pomegranate have grown well with scarcely any care, is sufficient evidence that the Peninsular lands are not dry, or arid, or desert.

It will be found an advantage that in Lower California no large region or area will have to depend for irrigation water upon a single considerable river. Disputes about water are already proving very troublesome in some parts of Upper California, and as the country becomes more densely populated they threaten to become more frequent and bitter. They arise in almost every case out of the fact that a number of different and rapidly growing localities depend for their irrigation water on the same stream, and those above interfere, by their use of the stream, with those at lower levels.

The mass of mountains which crowd the northern part of the Peninsula gives being to numerous small streams. These find their way to the coast from many different parts of the interior range; and it is a peculi-

arity of this region that most of these streams are "lost," as it is called, at some part of their course, reappearing in many, though not all cases still farther down, and often forming lagoons near the sea-shore, where the ocean throws up a bank across their mouths.

There are many such sunken streams in the northern part of the Peninsula, and wherever these occur it will be found that to dam up such a stream at a convenient part of its upper and sunken course will secure a supply of irrigation water at proper levels. In a journey over some part of this region which I made in 1881, I saw in a number of places these evidences of water; but of course the few and unenterprising Mexican farmers had neither means nor skill to use what nature offered them. The International Company's surveyors, who have examined this region much more closely than any one else, report abundant streams issuing from the mountains in the interior available for irrigation; and this was to be expected from the peculiarly mountainous character of this part of the Peninsula.

The experience which Californians have gained in the last fifteen years in the securing and economical management of irrigation water will be very helpful to settlers in Lower California. That experience shows not only that water is far more abundant than was suspected, and that it can be had wherever high mountain ranges exist to gather it from the clouds, but also that by their united efforts men of small means, few in number, can make themselves sure of a sufficient water supply. It has been found also that an insignificant con-

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stant stream suffices to water an astonishing quantity of land; that no such constant soaking of the soil as was practised twenty years ago by our people in California is required; that thorough and frequent ploughing is almost everywhere sufficient for grain crops, and that when once the subsoil has been penetrated by irrigation, the land thereafter needs comparatively little water.

It is an advantage also that the practice of settlement in "colonies" has been perfected and proved a conspicuous success in Upper California, for the many charming little valleys scattered among the mountains of Lower California are specially fitted for such settlement of colonists. By combined effort even a dozen or twenty farmers can in such valleys secure water, and forming a society among themselves, they can at once and easily provide a church, school-house, and other conveniences of life. Very soon, too, mechanics are drawn into such "colonies," and the little settlement has about it all it needs for the simple and independent life in a pleasant climate, where the house need be only a shelter, and no expensive barns, stables, and other out-houses are required.

Nor does this exhaust the possibilities of settlement in colonies. There is no reason why in such societies the middle-man should not be eliminated, why the colony should not buy at wholesale for all its members what they need from without, and thus effect so great a saving as would bring almost immediate prosperity to all. Almost every farmer, especially in a new country, has noticed that it is the "store-keeper" who

gets rich; who lives in a fine house and sends his sons to college and his daughters to boarding-school, while his customers, the farmers and mechanics, work unceasingly to get not much more than a bare living. A colony may easily, if it likes, save to its members all the profits on which the "store-keeper" makes a fortune. A colony may, if its members agree, make rules for economical management in still other ways; as, for instance, by uniting to do without fences around their lands, each keeping up his own cattle, which, where alfalfa is grown and ensilage is made, can be easily done.

It is to be hoped that the farmers who will settle in the pretty valleys of Lower California will try such expedients as these to make their labor more productive, and to economize their outlays.

Except on low-lying lands, I should say that irrigation will be required in Lower California at least as much as in San Diego, San Bernardino, and Los Angeles counties. But with water applied to the soil, what wonders, what miracles have been wrought in Southern California in a few years! I saw Riverside in the spring of 1872, when it was so dreary and desolate a spot that to my eyes, and to those of many others, it seemed a hopeless desert waste. The few orange-trees which had been set out had just been cut down by a bitter frost; the great plain was still bare, only three or four small frame houses standing on it; and the whole enterprise seemed to even my sanguine eyes so unpromising that I told Judge North, the founder of the colony, that I feared he had made a mistake, and I dared not give a very encour-

aging report of his enterprise—one of the earliest colonizing plans begun in the State—in my book. Every Californian knows what Riverside is now—with land selling at a thousand dollars per acre, and perhaps higher, and with its oranges, raisins, apricots, and other products famous all over the State and far beyond its boundaries. Water judiciously applied produced that magnificent result, and in ten years made a lovely and rich garden-spot out of what was originally a barren and most unpromising waste.

I drove the length and breadth of the Fresno country in 1872, when even the cattle-men thought it too arid and desert for their cows; now it is one of the justly famous garden-spots of California, rich with every product, from grain to raisins and other valuable fruits. The settlement of the Fresno country was also largely by colonies.

The "colony plan," as it was called, was laughed at for a while in California. I have watched the development of several of the most noted experiments with careful interest, and I do not know of one in which the members held together for even eight or ten years, without every man becoming comfortably independent. There can be no better evidence of the expediency and advantage of settlement in "colonies" than Anaheim. Its founders were not even farmers; they were, with scarcely an exception, city mechanics, unfamiliar with farm work. They were poor, and saved out of their earnings as mechanics a weekly or monthly sum to pay for their shares. They had one advantage—the services of an in-

telligent and faithful manager, who cared for their land and superintended their planting for them while they remained at work at their trades in San Francisco; for they were too poor to go upon their land until their vines were ready to yield a crop. I never thought the place of their settlement the best that could have been selected, and have no doubt that with the knowledge of wine culture now common in California, they could have chosen a better location. They began in extreme poverty, and yet I believe I am correct in saying that not one of the Anaheim colonists who held on but long ago became a man in comfortable and independent circumstances, while some became wealthy.

That part of Lower California now open to settlement through the International Company offers many valuable advantages to farmers and manufacturers. Its more southern position naturally induces the earlier ripening of such fruits as the orange and lemon, and will make profitable the cultivation of the banana and several other tropical fruits, for most of which the foreign market would be in the United States. The tariff duty may be against the Lower Californian in these products; but, on the other hand, he will have the command of the earliest market, and therefore the highest prices, which will more than counterbalance the tariff. For all other agricultural products, from grain and beans to apricots and prunes, he will have the advantage of an unlimited market in Western Mexico, in which the Mexican tariff on flour, canned fruits, butter, cheese, etc., will be in his favor. This advantage is so

obvious and great that fruit-canneries, flour-mills, and other manufactories to prepare farm products for market are already being established at a number of points on the Peninsula; and as the farming and fruit-growing population increases, and fruit-trees of various kinds come into bearing, the stimulus of the large market of Western Mexico, now supplied from San Francisco, will lead to the rapid increase of these and many other kinds of factories.

CHAPTER V.

THE RELATION OF SETTLERS TO THE GOVERNMENT.—SPECIAL PRIVILEGES.

THE special privileges granted by the Mexican Government to "colonists"—which means settlers who register themselves under that name—are also extremely valuable. The purchaser of land in Lower California from the International Company need not register himself as a "colonist" unless he wants to, but it is so clearly to the profit of all to do so that few will omit it.

To become a "colonist," he gives his name and Lower California address to the "Agent of Colonization" at Ensenada. He must at the same time bring from the International Company a certificate that he is a person of good habits and industrious character, and of the trade or profession he has followed. If he desires to retain his American or foreign citizenship he makes a declaration to that effect; but if he waits more than six months after being enrolled to make such a declaration, he is thereupon regarded as a Mexican citizen.

In either case, equally, whether he retains his original citizenship or becomes a Mexican citizen, he obtains as colonist the following important privileges, as specified in the "Colonization Act:"

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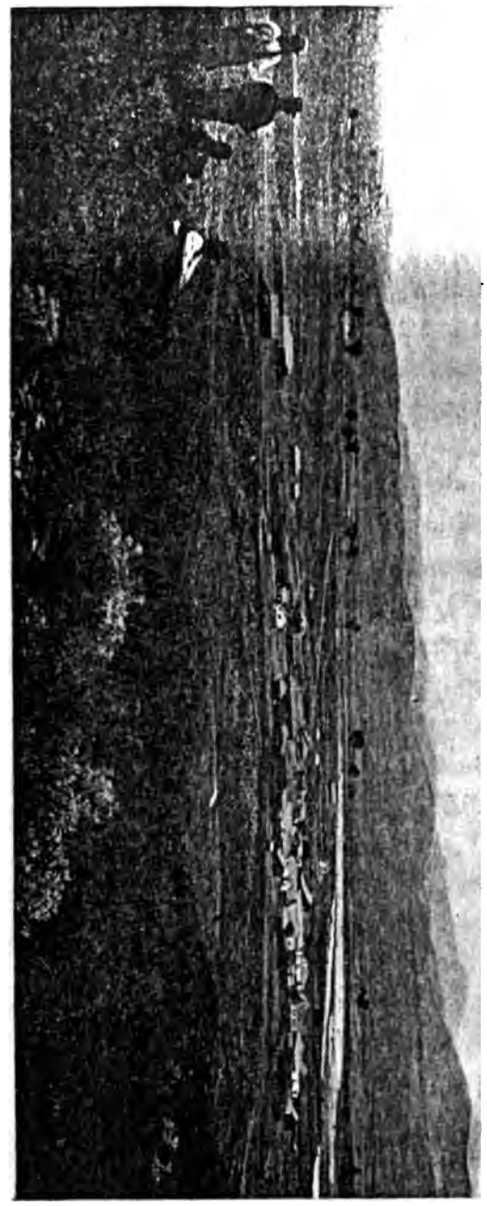

REAL DEL CASTILLO, SAN RAFAEL VALLEY.

"Article 7. The colonists settled in the republic will enjoy for a term of ten years from the date of their settlement the following privileges:

"I. Exemption from all military service.

"II. Exemption from all kinds of taxes [internal taxes are here meant].

"III. Exemption from import and domestic duties on provisions in places where there are no provisions; on working tools and implements; machinery; construction materials for houses; house furniture; and breeding animals for the colony.

"IV. Personal and untransferable exemption from duties on exportation of fruit raised in the colony."

The colonists settling under the International Company's grant have these privileges for twenty years instead of ten.

The permission of free importation of agricultural tools, machinery, lumber for houses and fences, and furniture, joined to the exclusive enjoyment of the market of Western Mexico, from the United States line to Guatemala, gives, it will be seen, very important advantages to the Lower California farmer and manufacturer. These are secured without prejudice to his original citizenship if he prefers to retain that, and without obliging him to assume any obligations other than to keep the peace and obey the laws. In an appendix will be found parts of the Mexican tariff on imports now in force, which will enable any one to see by what duties those setting up manufactures in Lower California can gain an advantage.

The transfer of titles when lands are sold differs somewhat in form from that in the United States, but is simple and easily effected. Land titles are formally recorded in books of record, kept in record-offices, just as in the United States; the titles of purchasers from the International Company in Lower California being recorded at Ensenada. Each State or Territory is subdivided into districts which are similar to our counties, and in each such district there is an established place of record. The original deed is placed on file in the record-office, and is signed by both the vendor and purchaser. In the case of transfers amounting to five hundred dollars or less, the purchaser sends his deed to the district land-office—Ensenada—with a letter requesting that it be placed on record, and that some one—naming him—may act as his agent in seeing the paper recorded and procuring a certified copy of it. Where a larger amount is involved, the purchaser must appear in person, or by legally authorized substitute holding his power of attorney, before the registrar to have the deed properly signed and recorded. Concerning transfer of land titles, mortgages, and wills, I am allowed to print a letter from Mr. Romero, the Mexican minister to the United States, which I have placed at the end of this chapter.

The purchaser of land from the International Company gets full and complete possession of his land, and does not bind himself to any condition of residence or improvement unless the sale is made subject to such conditions. He may sell freely, and in case of death may devise by will just as freely as in the United States,

and the transfer to his heirs is made with no more formalities or expense than in this country. If he should die intestate the Mexican law protects the rights of widows and children. The following correspondence sets forth these matters in some detail:

"ALPINE, BERGEN CO., N. J., *Nov.* 26, 1887.

"DEAR MR. ROMERO,—When we were talking in your house, two weeks ago, about my long-entertained and at last realized desire to own land in Lower California, I asked you about the laws of inheritance in Mexico, and you very kindly said that if I would send you some questions on this and other matters pertaining to land ownership in your country, you would answer them. If it is not too much trouble, will you, therefore, kindly tell me,

"1. Whether transfer of land titles by sale or through inheritance is easily and securely made in Mexico?

"2. Whether the records of titles are so kept that encumbrances, such as mortgages, can be easily and securely ascertained from the record?

"3. What, if any, are the legal limits to the devise of lands by will?

"4. Whether heirs under will or of an intestate have any more difficulty than with us in securing possession and good title to lands?

"5 Whether foreclosure of mortgages on land is attended with any particular difficulty or expense other than with us?

"6. Finally, whether in your judgment as a lawyer familiar with the land laws of your own country and of the United States, land titles are as secure, when well founded and duly recorded, and can be as readily and accurately traced as with us?

"I am yours, very truly,

"CHARLES NORDHOFF.

"To H. E. M. ROMERO, *Minister of Mexico.*"

Translation.

"WASHINGTON, *Nov.* 28, 1887.

"MR. CHARLES NORDHOFF, *New York:*

"MY ESTEEMED FRIEND AND SIR,—In answer to your letter of the 26th instant, in which you ask various questions in regard to the acquisition of lands, the transfer of the respective titles whether by way of purchase, by inheritance under a last will, or in intestacy, under the laws of Mexico, I reply that, as Mexico has a republican, popular, federal government, each State makes laws governing that which relates to such matters, and that in order to properly answer your questions, it would be necessary to refer to the special legislation of each State. But as your purpose seems to be to become acquainted principally with the regulations in such cases ruling in the Territory of Lower California, I inform you that said territory is governed by the Civil Code which was promulgated on the 31st day of March, 1884, for the Federal District and the territory aforesaid.

"Under this code (Article 3184) at every town where

there is a Judicial Court of First Instance, an office is established known as that of the Public Registry. This Registry is divided (Article 3185) into four bureaus: the first, in which are registered deeds of conveyance of the title to real estate or of rights relating to realty, and various rights relating to mortgages charged upon such real estate; the second the registry of mortgages; the third the registry of leases, and the fourth the registry of judgments.

"All contracts and instruments *inter vivos* which transfer or affect the ownership, the possession, or the enjoyment of real estate or real rights imposed upon the same, must be recorded (3194) unless (3195) the property or rights do not exceed in value $500, in which case it is not necessary to record the same.

"Such last wills as transfer the ownership of real estate or realty rights must also be registered (3197) after the death of the testator, and in case of intestacy (3198) the declaration made by the judge as to those who are the legitimate heirs and also the deed of partition must be recorded.

"Chapter III. of Title 23 of the Civil Code, Articles 3208 to 3218, fix the details of the manner of recording.

"As to estates, the Civil Code provides (3323) that every person shall have the right to freely dispose of his property, by way of inheritance or bequest, and that such right is not limited (3324) except by the obligation upon him to leave provision for the support of descendants, the wife or husband surviving, and ascendants, in

conformity with the rules established under the same article.

"In default of a last will, the code provides that the judge shall declare who are the heirs, and such declaration must be made in favor of the descendants, of the wife or husband surviving, and the ascendants and collaterals, etc., in the order established in the same code.

"I will add that, in my judgment, there are as many facilities to obtain the judicial acknowledgment of the rights of ownership in Mexico as there are in the United States, and so also as to collecting mortgages made on real estate; although the legislation of the two countries is somewhat different on account of our following the provisions of the Roman law and the United States those of the common law.

"I am, sincerely and truly,

"Your obedient servant,

"M. ROMERO."

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CHAPTER VI.

LAND TITLES.

AS there are no "public lands" in the northern part of the Peninsula, and settlers must deal with, and buy, and take title from, the International Company, the character and responsibility of this company, and the validity of its charters and titles, are of course of the first importance to intending purchasers. As I stated in the preface, I made for my own satisfaction and security as a purchaser a careful examination of these things, and I give in some detail in this chapter the results of this investigation.

The International Company of Mexico exists under special charter from the State of Connecticut, recognized in its various grants and concessions by the Mexican Government; as in the formal "Certificate of title to lands owned between parallels 28° and 32° 42′ in Lower California," where it is designated as "The Mexican International Company of Hartford, Connecticut." The company is composed of a number of prominent and well-known business men of undisputed integrity and high character. Its capital is twenty million of dollars. Its responsibility, as well as the perfection of its concessions and titles, have been carefully examined by the

company's fiscal agents here and in England. Mr. John W. Battem, a well-known Parliamentary barrister and railway director of London, personally inspected the country, and also the concessions made by the Mexican Government to the International Company, looking into all questions on which settlers and investors would desire full information, and upon his report the company's extensive operations in Europe were first based.

Captain George Clark Cheape, of County Fife in Scotland, a capitalist and large land-owner in three Scottish counties, after a careful examination of the company's titles, made a journey to Lower California, and after an examination of the company's lands, became largely interested in them.

The operations of the International Company of Mexico cover a very wide field, as it has grants in other parts of Mexico; and its Lower California concessions and work form only a part of its enterprises.

Besides its grants for surveying, occupying, and colonizing the northern part of the Peninsula of Lower California, it has extensive grants of lands in the Mexican States of Sonora, Sinaloa, and Chiapas, together with railroad charters in these States. Chiapas, which is the most tropical and one of the least-known of the Mexican States, adjoining and bordering upon the republic of Guatemala, is also, by the accounts of Mexican writers, one of the richest States of the republic in its natural products and its capacity to grow profitably coffee, sugar, India-rubber, and many other valuable tropical products. It needs a railroad to open it to settlement and commerce.

FIRST PIER, SAN QUINTIN.

FIRST PIER, SAN QUINTIN.

The International Company holds a concession to build and operate a railroad in Lower California, to connect the Peninsula with the United States. The line of this railroad has already been surveyed, and will be found marked on the map which accompanies this volume. Its northerly connection will be, as shown on the map, with San Diego; and this part of the line, to be built at once, will tap the various interior settlements now forming, as well as points at which gold and other minerals have been recently discovered. The easterly line will cross the upper end of the Peninsula and pass through the States of Sonora and Chihuahua to El Paso.

Under its concession for a railroad in Chiapas the company will build a line from the Pacific port of San Benito to the Atlantic port of the Grijalba River. This will be a transcontinental line. It will pass through the coffee lands and large untouched mahogany forests of Chiapas, and will tap also similar regions in neighboring Guatemala. The surveys of this line have been lately completed, and work on it has been commenced.

The company further operates under a concession the guano islands of the Pacific and Gulf coasts of Mexico, especially in the Gulf of California, where valuable phosphate deposits are found. It has for some time past shipped, and is still shipping, about one thousand tons per month of this guano to Europe and to San Francisco, and employs in this work two steamers, several sailing-vessels, and about three hundred and fifty men.

Its own steamers run regularly between San Diego and those Peninsular ports where settlements have been

formed, the connection between San Diego and Ensenada being tri-weekly, with a daily overland stage connection also.

Its concessions or grants in Lower California were made on the condition of a complete and satisfactory survey of the region within their limit. When this survey was made and accepted by the Mexican Government, the company became thereby the owners of one-third of the vacant lands surveyed; and were entitled further to purchase the other two-thirds by a cash payment at the price established by the Mexican Congress for public lands.

The required surveys in Lower California were begun at the stipulated time, completed and accepted by the Mexican Government, and formally recorded in its Department of Works; the cash payment, which, under the law, the company could have made in instalments, was made complete in one sum; and under date of "Mexico, October 20th, 1886," Mr. Pacheco, Minister of Public Works, which is the equivalent of the Secretary of the Interior in the United States, certifies, "By direction of the President of the Republic:"

"That the titles of the property acquired by Messrs. Luis Huller & Co., whose Company has the name The International Company of Mexico (of Hartford), are perfectly legal."

He further certifies in the same document:

"That the said Company have paid into the National Treasury the whole value [price] of said lands."

He further adds:

"The Company may sell to Enterprises or individuals the lands under consideration in this communication, as it is expressly stipulated in the Contract of 21st of July, 1884, whether the purchasers are Mexicans or foreigners."

That is to say, all the conditions on which the company received its concessions, and holds in ownership its nearly sixteen million acres of land, are thus officially declared to have been fulfilled; the sole remaining obligation being to complete the settlement of the territory within ten years, in the proportion of one family to every 6175 acres; but the grant admits and recognizes that the settlers or colonists may be located at their own convenience, and not of necessity upon each separate section of land. It is required only that a certain population shall be settled within the limits of the company's grant. The language of the "Certificate of Title" from the Government to the company on this point is:

"A number of families may be established in one place or town, for the intent of the law is for the establishment of colonies, the number of families according to the extent of territory."

The company has also, under its charter and grant, the right to purchase land held by private ownership within its limits, and it has actually purchased the majority of such private holdings. It gives its own warrantee deeds, which are confirmed by the Mexican authorities and duly recorded in the public office at Ensenada.

The following details in regard to the International Company's Lower California grants and concessions are here added as interesting to intending settlers:

I. The concessions or grants were originally made by the President of Mexico, under the authority given him in a law of the Mexican Congress of December 15, 1883, known as the "Colonization Act." By this act the President of the republic was authorized to make contracts with individuals and corporations for certain purposes, which are specified in the act. Article 24th of the Colonization Act is in these words:

"The Executive may make contracts with companies for the introduction into the Republic of colonists and foreign immigrants and their settlement thereon, under the following conditions:

"1. The Companies must specify the exact period of time in which they are to introduce a certain number of colonists [ten years in the case of the International Company].

"2. Colonists or immigrants must be subject to the conditions established in Articles 5 and 6 of the present law." (Articles 5 and 6 require that all colonists shall get from the company a certificate that they are persons of good habits, and stating what occupation they have followed.)

II. The Lower California grants under which the International Company holds are three in number, and were made to individual members of the International Company of Mexico, and by them legally and with the consent of the Mexican Government transferred to the company. The first, in the name of Adolfo Bulle, covered the section between parallels 28° and 29°. The second, in the name of Telesforo Garcia, covered the right

to survey the public lands between latitude 29° and the United States boundary on 32° 22′, taking for this service one-third of the public lands surveyed. The third concession is in the name of Luis Huller, and covers the right to purchase for cash the remaining public lands from latitude 29° to the United States boundary. All these grants were, as has been said, in due legal form, and with the consent of the Mexican authorities, made over to the International Company of Mexico.

III. The conditions on which the International Company received and accepted its various grants covering Lower California were these:

1. That it should within a specified time file a bond in current funds with the Mexican Treasury Department, for the faithful and timely performance of its agreement. *This was done.*

2. That it should proceed within a prescribed time to begin its surveying operations. *This it did.*

3. That the required surveys should be completed within another prescribed period. *They were so completed.*

4. That all its surveys and reports should be verified and accepted in a legal and formal manner by the proper authorities, and all the data recorded in the Office of Public Works in the City of Mexico (equivalent to our Interior Department) within a prescribed time. *All this was done.*

5. That a specified sum of money should be paid by the company into the Mexican Treasury, for the purchased lands, within a fixed period. *This was done.* Finally,

6. That within ten years there should be settled within the territory granted it in Lower California, on the lands acquired, two thousand or more families as "colonists"—one hundred families to be settled within two years. Many more than one hundred families have been settled within the two years.

IV. The Mexican Government, in making these concessions, stipulated, as is its invariable custom, that unless the conditions of the grants should be fulfilled within the time fixed, the rights of the concessionaries should lapse and fail. If, therefore, the company had failed—

1. To pay certain bonds into the Treasury as an evidence of good faith, or

2. To begin its surveys within a specified time, or

3. If it had failed to complete this field-work within the stipulated time, or

4. If it had failed within the time limit to pay into the Mexican Treasury the cash sum required to complete the purchase of its lands—

in case of any such failure the company's rights would have been forfeited. But as the Government's official certificates already quoted show that all the conditions were fulfilled as agreed, the company's titles are thus complete.

V. There remains the final stipulation that the company shall within two years settle one hundred families, which it has done, and within ten years two thousand

families, which it will certainly and easily be able to do. But the Government declares in the contract with the company that if the company should fail in the latter act, the Government will place the remaining families there by its own action; but in this case distinctly agrees that such failure on the company's part shall not in any way touch, invalidate, or interfere with the titles of settlers who have bought lands of the company.

Article 24th of "Contract made between General Carlos Pacheco, Secretary of Public Works, representing the Executive of the Union, and Sres. Luis Huller & Company (The International Company of Mexico), for colonizing vacant lands in Lower California and Isle de Cedros," declares:

"If the colonization is not effected, even although the demarcation, description, apportionment of the lands, and drawing up of the plans is all done, the lands sold to the Enterprise shall revert to the Nation, which shall not have to make any restitution of what it may have received for them. In the case of a part of the lands having been colonized in conformity with the clauses of this contract, *only those lands shall revert to the Nation that have not been colonized;* neither the colonists established nor the Enterprise shall be disturbed on account of the proportion of the lands assigned to the former at the rate of 2000 hectares [4940 acres] per family, inclusive of the land which may have been given to the colonists."

It is thus certain that the company having fulfilled all its preliminary stipulations, and being authorized to sell to settlers of any nationality, and give deeds recog-

nized and confirmed by the Mexican Government, any possible future complications of the company with the Government cannot affect those who may have meantime purchased lands.

VI. The company's grants do not cover the whole of Lower California, as Mr. J. B. Hale has a very large grant in the southern part of the Peninsula, where he gathers orchilla. The Hale grant is a strip of land fifteen miles wide from the sea-shore, between latitude 29° and 23°. Mr. G. Andrade has another grant of about 800,000 acres of land lying in the valley of the Colorado River, which is the north-eastern boundary of the territory. These grants do not trench upon or conflict with the International Company's territory.

VII. The company's titles to its lands are officially recorded in the office of the Minister of Public Works, in the City of Mexico, and certified duplicate copies are on record in the town of Ensenada, which is the capital of the district of northern Lower California.

VIII. The title-deeds given by the company to those who buy its lands are recorded in the proper office of record in Ensenada.

IX. The title of the company being officially recognized as perfect, and its right to convey parts of its lands to others legal and complete, it remains only to add that when the company gives a deed, the purchaser and holder enters into full, unencumbered, and peaceable possession of the land, without question or reservation of any kind—with only this possible exception: If a discovery of precious metals should be made by a third person on

his land, as gold, silver, or other mineral in the form of a lode or vein, the discoverer could, under Mexican laws, take up a claim in about the same form as in the United States, but before working it would have to give security that he would not disturb growing crops or interfere in any way with the rightful use of the surface of the ground; that he would not by his underground work imperil the surface, nor disturb any habitation, or interfere in any other way with the peaceable enjoyment by the owner of all his rights in the lands. If the mineral discovered should be coal, marble, or valuable stone, this belongs to the owner of the land.

CHAPTER VII.

THE MEXICAN GOVERNMENT AND THE COMPANY.

IN the fall of 1887 certain opposition journals and public men in the city of Mexico criticised President Diaz and his administration for his colonization policy, suggesting that it was not in consonance with the laws of Congress, and that it was not calculated to benefit the country. The concessions granted in Lower California to the International Company were, among others, attacked in this way.

President Diaz at once caused the proper officers of the Government to answer in detail every objection which had been offered, and the reply, when completed, was published in a considerable pamphlet, of which I have a copy, and in which it is shown clearly:

1. That the various colonization concessions have been made in strict and absolute conformity to the laws of Congress.

2. That the concessionaries have been in every case held by the Government to a strict fulfilment of all the conditions.

3. That the new land policy declared by the Congress during the administration of President Gonzalez, and carried into effect by President Diaz, has been of great

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A GLIMPSE OF ROSARIO VALLEY.

benefit to Mexico, and was a change very much needed from a former ineffective and expensive system.

Under the old system in force previous to the passage of the Colonization Act of December, 1883, the Government founded colonies and maintained them at its own cost and expense. These experiments were not successful; but they cost the treasury large sums, as will be seen by the official returns for only a few years:

Statement of the Sums expended on the Colonies founded by the Government.

DEPARTMENT OF PUBLIC WORKS, COLONIZATION, INDUSTRY, AND COMMERCE, SECTION 6. MEXICO, *December* 4, 1887.

Fiscal Years.	Sums Expended.
1881 to 1882	$473,057 32
1882 to 1883	725,178 70
1883 to 1884	290,289 42
1884 to 1885	41,104 76
1885 to 1886	15,226 10
1886 to 1887	41,567 75

CARLOS K. RUIZ, the Chief of the Section.

The moderate expenditures since 1884 are for the continued maintenance of Government colonies, which, as the report shows, are not progressing.

Under the Colonization Act of 1883, this drain upon the Treasury, for in the most cases futile attempts, has ceased. Under the new system, the Government, as the report shows, is relieved even of the cost of surveys of its public lands; and it receives money payment for so much of these lands as it grants to colonizing companies, these taking the risks of the enterprise and forfeiting all their expenditures and their unsold lands

if they do not fulfil all the conditions, which include, of course, the settlement of people on these lands.

Mr. Pacheco, the Minister of Hacienda, having recited all the various colonization laws adopted during sixty years, from 1823 to 1883, shows in detail how all except the last had failed, and why. He remarks that Mexico lived too long in isolation, to the impoverishment of her people and her government; he shows how the United States, Australia, and in more recent times the Argentine Republic, have prospered by a more liberal course, and says:

"The isolation which was forced on us during the colonial period, keeping us estranged to all scientific and industrial progress of Europe, pauperized us to such a degree that our population and our governments have been at times in absolute indigence, and that in the presence of a prodigality of natural resources.

"The only perceptible prosperity now enjoyed by us, of which the gradual increase is incontestable, coincides exactly with the practice of a more liberal policy, which, by facilitating the entrance of foreign capital and labor, adds daily to the public wealth, brings funds to the Treasury, gives us credit abroad, raises us from day to day to a higher level of reputation, respectability, and power. It may be, therefore, taken as incontestable that the country needs to attract the aid of foreign labor and capital."

Having thus discussed the policy of the Colonization Law of 1883, and the beneficent results flowing from it, Mr. Pacheco shows:

1. That this, the latest law on the subject, superseded all others relating to colonization:

"The law of 15th December, 1883, is the only law on colonization now in force, and in its Article 31 it abolishes all previous laws on the subject, in the following terms:

"Article 31. All laws on colonization anterior to the present are abolished."

2. He proceeds to compare the acts of the Government under this law with the law itself; and coming to the concessions made to the International Company in Lower California, he compares the contract of this company with the law, article by article, proving at every step, by this close and accurate analysis, that the contract and concession were in fact drawn with remarkable care to follow in every detail the provisions of the Colonization Law. So far from having exceeded the law, he shows that the Government exacted everything the law required, and in its care for the public interest took safeguards and required conditions not called for in the law, except by fair inference. He concludes in these words:

"It is proved in the foregoing analysis that the contract made with the citizen Luis Huller is strictly within the prescriptions of the law, and if there is anything in the contract that is not contained in the law, it is the precautions that the Government has taken within its powers on behalf of the Nation and the colonists."

He adds that it has thus "been clearly demonstrated that the Executive has walked step by step by the letter,

and duly interpreted the spirit of the law in forming the stipulation of the two contracts with Huller and Bulle, and has continued, but still improving them, the traditions of previous governments."

Finally, Mr. Pacheco shows that the Congress had already discussed and scrutinized the question of the Lower California and other grants made under the law of 1883, and had by its express action sanctioned and approved all these acts of the Executive:

"It is proper to recall here the report rendered by the undersigned to the National Representative Assembly on the 17th October, 1885, concerning the proposition approved by that assembly that the Department of Public Works should report on all the contracts that have been made for the demarcation and colonization of unoccupied lands from the 1st December, 1876, up to that date, in which number are included the contracts made with Messrs. Huller and Bulle, which I have just discussed. That report gave origin to prolonged and luminous debates, and, as soon as the propriety of all the proceedings of the Government was clearly shown, the Chamber of Deputies rejected the proposition that had been offered by some of its members for an addition to be made to the law of December 15th, 1883, forbidding the Executive to make any contract relating to unoccupied lands without previously submitting it to Congress for approval; thus sanctioning the course followed by the administration and disposing of the charges which were even then also being made against the Department of Public Works of having exceeded the powers accorded

to it by the law. The report to which I allude, together with justificatory documents, was printed by order of the Chamber on the 19th October of the same year and circulated in profusion."

This official publication of the Mexican Government of course settles all questions which could be raised as to the validity and legality of the concessions and contracts it has made with the International Company.

But it does much more than this. It exhibits the liberal and enlightened spirit which has now the lead in Mexican affairs, and no one can read Mr. Pacheco's report without gaining full confidence in the settled and increasing prosperity of the republic.

The "policy of isolation," which Mr. Pacheco condemns, and which ceased when the Congress passed the Colonization Law of 1883, was the most dangerous policy to Mexico. To exclude immigration or tolerate it only under intolerable conditions, forced foreigners to cast covetous eyes on the Mexican domain. It alone gave rise to constant schemes of annexation and revolutionary separation. To forbid or make difficult and insecure the entry of capital and labor from without, necessarily united capital, labor, and enterprise in hostility to Mexico, and led to schemes against the integrity of her territory.

To welcome capital and labor and make both secure makes these her friends and allies, and unites them in a common interest with her. Hence the enlightened spirit which led the Congress to adopt the law of 1883, and which has led President Diaz and his administration to

carry out with liberal zeal this act, is the best guarantee Mexico can have of a future secure against attempts upon her territory, and of additions to her population having mutual interests with her people, and sure under the force of such mutual interests to be true to her and to become a part of her people and her wealth.

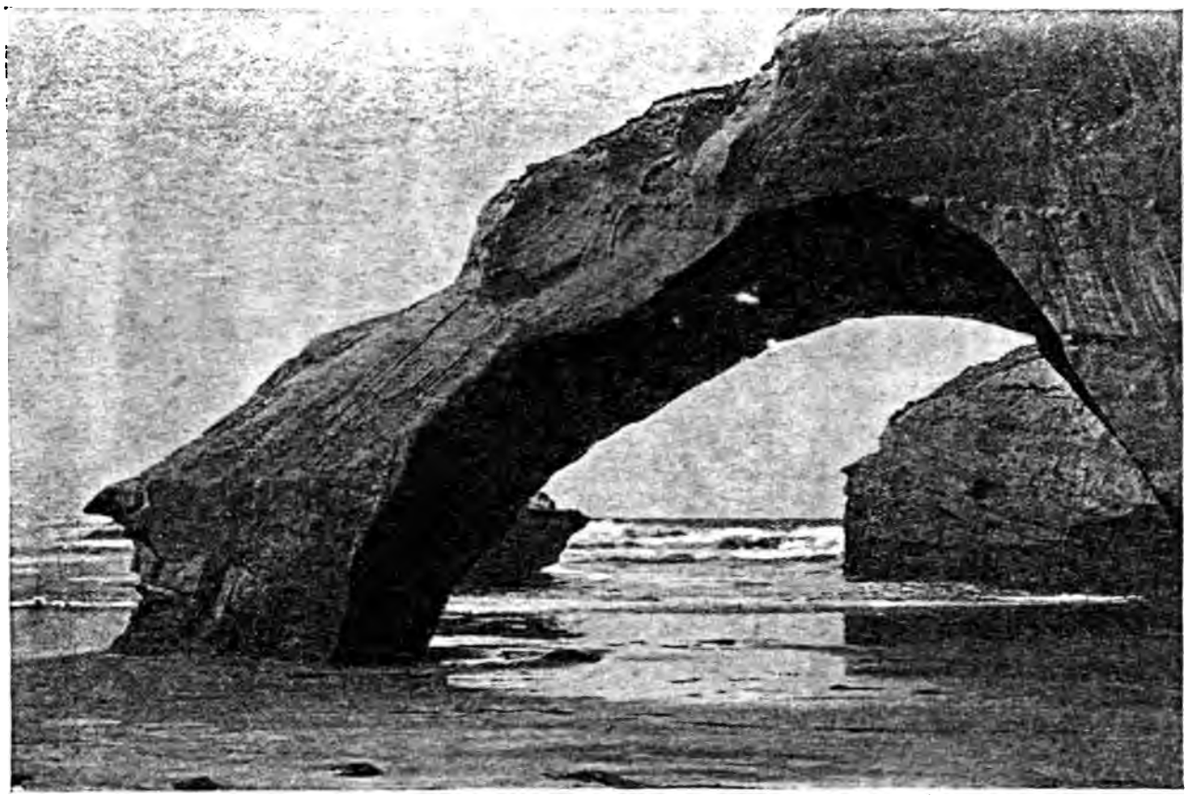
APPENDIX A.

TABLES OF TEMPERATURE AND RAINFALL.

TEMPERATURE observations cover only the short period since competent observers were at hand to record them—about two years; and the following tables apply to the region of Todos Santos Bay. The interior valleys are hotter, the elevated mountain regions cooler. The rainfall varies also. In the mountain region it rains in midsummer as well as in winter, and the annual rainfall is greater than on the Pacific coast. I have been unable to secure complete daily returns for a whole year. In a new country observers are apt to be sent off to other work, and thus the records are incomplete. The reports I give show the greatest heat of the summer months and the lowest temperature of the winter, with the daily variations. These are the facts which physicians and invalids most need.

MEAN MONTHLY TEMPERATURE AT ENSENADA, OBSERVED DURING THE LAST TWO YEARS (1886–88).

	7 A.M.	3 P.M.	11 P.M.
January	50.0°	62.4°	54.6°
February	51.1	62.3	55.5
March	52.8	63.3	56.9
April	54.5	65.6	59.0
May	58.6	68.2	62.2
June	62.5	71.6	65.2
July	65.5	74.2	67.6
August	67.0	75.7	69.4
September	63.7	74.5	69.4
October	64.7	74.5	67.6
November	54.5	67.7	58.6
December	52.0	64.7	56.1



ARCH ROCK (FROM CAVE), NEAR MOUTH OF ROSARIO RIVER.

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The following are detailed daily

RECORDS OF TEMPERATURE AT ENSENADA, LOWER CALIFORNIA, FOR THE MONTHS NAMED. JULY, 1887.

Date.	8 A.M.	12 M.	4 P.M.	Max. for 24 hrs.	Min. for 24 hrs.	Variation for 24 hrs.
July 11	66°	71°	69°	72°	64°	8°
" 12	65	70	69	70	62	8
" 13	66	69	69	70	64	6
" 14	65	68	66	69	64	5
" 15	64	68	68	70	62	8
" 16	66	71	66	71	63	8
" 17	68	70	66	72	63	9
" 18	68	73	70	74	64	10
" 19	64	74	74	75	62	13
" 20	65	74	74	75	58	17
" 21	67	72	74	76	60	16
" 22	68	74	73	78	62	16
" 23	69	75	74	78	63	15
" 24	66	72	68	72	63	9
" 25	68	72	70	74	63	11
" 26	65	72	72	74	62	12
" 27	68	75	74	76	62	14
" 28	69	75	73	75	65	10
" 29	72	74	70	75	62	13
" 30	65	72	72	75	62	13
" 31	68	72	70	74	63	11

RECORD OF TEMPERATURE AT ENSENADA, LOWER CALIFORNIA, AUGUST, 1887.

Date.	8 A.M.	12 M.	4 P.M.	Max. for 24 hrs.	Min. for 24 hrs.	Variation for 24 hrs.
Aug. 1	65°	73°	70°	73°	60°	13°
" 2	65	71	69	72	62	10
" 3	62	70	70	72	57	15
" 4	60	72	70	73	59	14
" 5	65	72	70	72	62	10
" 6	64	75	74	78	62	16
" 7	65	75	74	76	63	13
" 8	66	69	67	70	62	8
" 9	65	70	69	72	62	10
" 10	66	74	73	75	65	10

RECORD OF TEMPERATURE AT ENSENADA, LOWER CALIFORNIA, AUGUST, 1887
—*Continued.*

Date.	8 A.M.	12 M.	4 P.M.	Max. for 24 hrs.	Min. for 24 hrs.	Variation for 24 hrs.
Aug. 11	68°	71°	70°	77°	64°	13°
" 12	62	73	74	74	62	12
" 13	64	70	69	71	63	8
" 14	65	73	70	73	62	11
" 15	65	73	70	75	64	10
" 16	66	72	70	72	63	9
" 17	65	70	69	70	59	11
" 18	67	72	70	73	63	10
" 19	68	72	78	79	64	15
" 20	69	74	79	79	67	12
" 21	64	72	72	75	63	12
" 22	66	75	75	76	63	13
" 23	66	70	69	71	64	7
" 24	67	76	70	71	65	6
" 25	66	71	70	72	57	15
" 26	67	72	69	73	59	14
" 27	65	72	70	72	60	10
" 28	65	72	70	73	57	16
" 29	66	71	70	72	61	11
" 30	68	72	71	72	62	10
" 31	62	65	67	72	57	15

TEMPERATURE AT ENSENADA FOR SEPTEMBER, 1887.

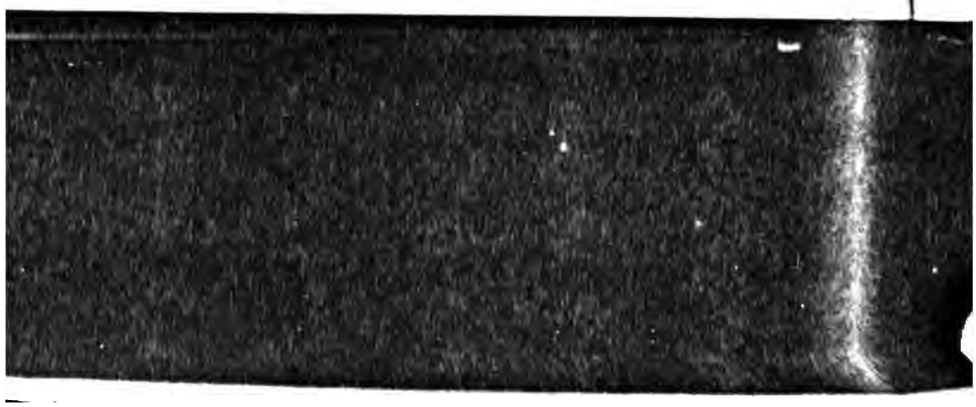
Date.	Maximum.	Minimum.	Variation.	
September 1	72°	60°	12°	
" 2	75	62	13	
" 3	69	60	9	
" 4	70	61	9	
" 5	71	62	9	
" 6	74	56	18	
" 7	78	58	20	
" 8	73	54	19	
" 9	71	61	10	
" 10	71	60	11	Rain.
" 11	70	63	7	

TEMPERATURE AT ENSENADA FOR SEPTEMBER, 1887—*Continued.*

Date.	Maximum.	Minimum.	Variation.	
September 12	72°	64°	8°	
" 13	72	65	7	
" 14	74	65	9	
" 15	70	60	10	
" 16	73	64	9	
" 17	75	60	15	
" 18	74	63	11	
" 19	74	62	12	Rain.
" 20	76	68	8	
" 21	79	71	8	
" 22	77	74	3	Rain.
" 23	72	64	8	Rain.
" 24	72	62	10	
" 25	72	62	10	
" 26	72	62	10	
" 27	72	64	8	
" 28	74	68	6	
" 29	76	66	10	
" 30	76	64	12	

TEMPERATURE AT ENSENADA FOR OCTOBER, 1887.

Date.	Maximum.	Minimum.	Variation.
October 1	72°	66°	6°
" 2	72	62	10
" 3	72	64	8
" 4	72	62	10
" 5	76	64	12
" 6	72	64	8
" 7	72	64	8
" 8	72	62	10
" 9	72	60	12
" 10	74	62	12
" 11	76	63	13
" 12	77	64	13
" 13	77	64	13
" 14	78	65	13
" 15	76	64	12



TEMPERATURE AT ENSENADA FOR OCTOBER, 1887—*Continued.*

Date.	Maximum.	Minimum.	Variation.
October 16	76°	62°	14°
" 17	75	62	13
" 18	76	63	13
" 19	79	65	14
" 20	92	70	22
" 21	96	70	26
" 22	82	58	24
" 23	76	55	21
" 24	75	54	21
" 25	82	58	24
" 26	78	57	21
" 27	76	50	26
" 28	88	48	40
" 29	89	60	29
" 30	80	57	23
" 31	78	48	30

ENSENADA WEATHER REPORT FOR FEBRUARY, 1888.

Date.	8 A.M.	12 M.	4 P.M.	Maximum.	Minimum.	Range.
Feb. 1	51°	61°	60°	62°	48°	14°
" 2	52	60	60	62	49	13
" 3	53	62	61	63	50	13
" 4	54	64	62	64	51	13
" 5	55	65	64	66	54	12
" 6	55	66	65	68	54	14
" 7	60	64	62	64	47	17
" 8	60	63	61	63	46	17
" 9	60	63	62	64	50	14
" 10	61	64	63	64	53	11
" 11	62	63	62	63	55	8
" 12	63	64	62	64	56	8
" 13	60	63	61	64	57	7
" 14	61	63	60	63	57	6
" 15	60	63	62	64	55	9
" 16	61	63	62	63	53	10
" 17	60	62	61	62	45	17
" 18	60	62	61	63	44	19

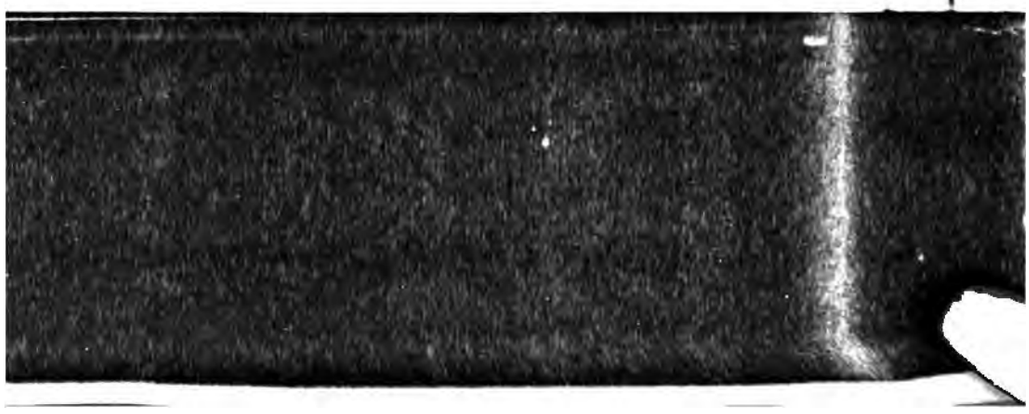
ENSENADA WEATHER REPORT FOR FEBRUARY, 1888—*Continued.*

Date.	8 A.M.	12 M.	4 P.M.	Maximum.	Minimum.	Range.
Feb. 19	57°	65°	62°	67°	46°	21°
" 20	56	66	63	66	45	21
" 21	58	66	64	68	46	22
" 22	58	67	67	70	48	22
" 23	57	69	65	70	50	20
" 24	60	73	69	73	50	23
" 25	60	74	67	74	51	23
" 26	61	71	68	72	50	22
" 27	60	68	68	70	49	21
" 28	60	65	60	65	45	20
" 29	55	62	60	63	44	19

Highest temperature for month.....74°.
Lowest temperature for month .....44°.
Variation for month..... 30°.
Average daily variation ..... 15.7°.
Rainfall during month of February, 29th..... .78 inches.
Season's rainfall to date..... 8.71 "

ENSENADA WEATHER REPORT FOR MARCH, 1888.

Date.	8 A.M.	12 M.	4 P.M.	Maximum.	Minimum.	Range.
March 1	49°	57°	56°	58°	40°	18°
" 2	50	59	57	60	42	18
" 3	50	58	58	60	46	14
" 4	55	60	58	60	48	12
" 5	54	61	57	61	44	17
" 6	53	60	58	60	45	15
" 7	54	60	55	61	52	9
" 8	55	59	55	60	50	10
" 9	55	60	56	61	51	10
" 10	54	61	57	61	48	13
" 11	56	60	58	61	47	14
" 12	55	62	69	62	46	16
" 13	54	60	59	60	45	15
" 14	53	62	60	62	47	15
" 15	55	62	61	63	48	15
" 16	56	67	67	69	50	19



ENSENADA WEATHER REPORT FOR MARCH, 1888—*Continued.*

Date.	8 A.M.	12 M.	4 P.M.	Maximum.	Minimum.	Range.
March 17	55°	68°	63°	70°	51°	19°
" 18	57	67	68	70	49	21
" 19	58	69	67	70	50	20
" 20	55	67	65	67	49	18
" 21	54	65	65	67	48	10
" 22	55	64	63	64	52	12
" 23	57	62	61	63	51	12
" 24	56	62	61	62	53	9
" 25	57	61	60	61	54	7
" 26	55	60	57	60	53	7
" 27	55	64	63	65	44	21
" 28	54	67	64	67	48	19
" 29	60	68	68	70	46	24
" 30	61	67	66	67	49	18
" 31	63	67	65	68	50	18

Highest temperature for month	70°.
Lowest temperature for month	40°.
Variation for month	30°.
Average daily variation	15.3°.
Rainfall during month of March, 1st	.65 inches.
" " " 3d	.80 "
" " " 4th	.02 "
" " " 7th	.70 "
" " " 8th	.25 "
" " " 24th	.10 "
" " " 25th	.35 "
" " " 26th	.06 "
" " " 27th	.42 "
Total rainfall for month	3.35 "
Previously reported	8.71 "
Season's rainfall to date	12.06 "

I append here some tables of temperature, taken from Dr. Bennett's work, "Winter and Spring in the Mediterranean," and also some taken from my own book, "California: For Health, Pleasure, and Residence." They may serve for comparison with the Ensenada reports.

Observers of climate in different parts of the world ought to settle upon some one definite system for recording their observations. Until this is done comparisons will be made with difficulty. Still, persons interested in climate may with a little trouble study out in these tables the facts they need.

TEMPERATURE AT MENTONE FOR FIFTEEN WINTERS, 1859–74. (Dr. Bennett.)

Date.	Min.	Max.
November, 1859	54.4°	61.4°
" 1860	49.5	60.9
" 1861	47.7	60.3
" 1862	50.2	61.2
" 1863	50.5	63.
" 1864	48.	60.8
" 1865	50.8	60.3
" 1866	50.	62.3
" 1867	47.9	62.2
" 1868	46.	56.5
" 1869	46.6	59.
" 1870	48.5	59.4
" 1871	48.	57.6
" 1872	51.	60.8
" 1873	48.8	56.3

Date.	Min.	Max.
December, 1859	44.8°	55.6°
" 1860	44.3	59.2
" 1861	43.4	54.8
" 1862	42.6	54.
" 1863	44.3	51.7
" 1864	44.2	56.2
" 1865	43.6	54.5
" 1866	45.7	55.7
" 1867	41.6	55.3
" 1868	48.8	58.7
" 1869	43.3	54.7
" 1870	42.	52.1
" 1871	39.7	50.3
" 1872	48.	56.7
" 1873	47.1	56.7

Date.	Min.	Max.
January, 1860	44.8	52.8
" 1861	45.1	52.4
" 1862	43.2	50.7
" 1863	43.2	52.4
" 1864	38.2	48.7
" 1865	43.	55.
" 1866	43.8	55.3
" 1867	43.8	54.1
" 1868	42.3	53.5
" 1869	41.5	53.3
" 1870	40.7	53.2
" 1871	40.2	51.6
" 1872	44.5	55.3
" 1873	44.7	54.5
" 1874	43.4	52.9

Date.	Min.	Max.
February, 1860	40.	55.9
" 1861	45.7	52.9
" 1862	41.9	55.8
" 1863	42.3	54.1
" 1864	41.9	53.6
" 1865	40.1	54.
" 1866	46.5	61.1
" 1867	45.4	56.9
" 1868	45.	56.7
" 1869	46.6	58.3
" 1870	43.4	55.4
" 1871	43.3	55.9
" 1872	46.1	57.
" 1873	41.3	53.8
" 1874	43.	54.6

TEMPERATURE AT MENTONE FOR FIFTEEN WINTERS, 1859–74—*Continued.*

Date.	Min.	Max.	Date.	Min.	Max.
March, 1860	44.9°	59.8°	April, 1860	51.2°	67.5°
" 1861	44.4	58.9	" 1861	49.8	66.9
" 1862	46.7	61.9	" 1862	51.2	68.5
" 1863	45.4	58.9	" 1863	50.9	67.
" 1864	45.4	62.	" 1864	51.8	66.
" 1865	40.5	57.3	" 1865	55.1	66.
" 1866	44.	60.6	" 1866	49.	66.9
" 1867	47.2	62.4	" 1867	51.4	68.4
" 1868	45.2	59.	" 1868	49.5	66.3
" 1869	41.5	56.7	" 1869	48.9	69.1
" 1870	44.4	58.7	" 1870	49.1	65.7
" 1871	47.5	61.	" 1871	51.3	67.4
" 1872	47.9	60.8	" 1872	51.8	68.5
" 1873	48.5	61.2	" 1873	49.8	60.
" 1874	46.	56.7	" 1874	51.3	60.5

NILE AND MENTONE TEMPERATURES COMPARED BY DR. BENNETT.

	MINIMUM.				MAXIMUM.			
	JANUARY.		FEBRUARY.		JANUARY.		FEBRUARY.	
	Nile.	Ment.	Nile.	Ment.	Nile.	Ment.	Nile.	Ment.
1	38°	46°	44°	41°	67°	53°	73°	56°
2	39	48	43	43	65	57	74	56
3	42	50	47	37	61	57	83	50
4	45	52	49	38	73	58	85	50
5	44	52	44	36	76	60	80	50
6	39	51	42	38	75	57	85	54
7	40	47	50	40	77	53	67	56
8	39	43	48	40	75	51	66	56
9	43	43	50	37	82	49	68	56
10	45	43	40	42	70	52	64	57
11	44	48	38	43	69	53	75	56
12	41	48	43	41	75	52	77	55
13	43	43	44	38	76	50	80	53
14	43	43	43	39	79	51	81	55
15	44	46	42	38	66	54	84	57
16	43	43	50	39	70	51	86	57
17	51	42	50	42	77	53	88	55

NILE AND MENTONE TEMPERATURES COMPARED BY DR. BENNETT—*Continued.*

	MINIMUM.				MAXIMUM.			
	JANUARY.		FEBRUARY.		JANUARY.		FEBRUARY.	
	Nile.	Ment.	Nile.	Ment.	Nile.	Ment.	Nile.	Ment.
18	49°	45°	55°	39°	73°	53°	90°	55°
19	44	45	40	39	67	53	66	57
20	45	47	40	38	73	50	70	55
21	45	45	50	37	73	51	74	54
22	45	45	45	42	76	53	77	57
23	51	44	50	40	75	48	74	55
24	50	40	40	40	75	50	79	57
25	50	43	40	42	78	49	80	58
26	51	40	49	42	82	50	74	57
27	48	40	48	42	75	49	65	55
28	46	42	40	43	71	51	65	61
29	45	41	49	44	76	51	66	62
30	51	41	—	—	75	48	—	—
31	42	42	—	—	82	52	—	—

MEAN MAXIMUM TEMPERATURE IN THE SHADE ON THE NILE, AND AT MADEIRA, MALAGA, AND MENTONE, IN JANUARY AND FEBRUARY, 1860.

	January.	February.
Nile	72°	75°
Madeira	66	67
Malaga	58	58
Mentone	52.8	55.9

Dr. Bennett.

VARIOUS FOREIGN CLIMATES (FROM DR. BENNETT).

PLACES.	MEAN TEMPERATURE OF MONTHS.											
	Jan.	Feb.	Mar.	April.	May	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
Cairo	58.10	56.12	64.58	77.90	78.26	83.66	85.82	85.82	79.16	72.32	62.96	61.34
Madeira	59.71	60.28	61.86	62.03	63.44	66.90	70.04	71.88	71.28	66.76	63.96	61.44
St. Michael's (Azores)	59.00	59.00	59.50	61.00	63.00	67.00	68.00	70.00	68.00	63.00	56.00	55.60
Naples	46.50	48.50	52.00	57.00	66.50	71.00	75.00	76.50	72.50	65.00	54.50	50.50
Mentone	48.02	48.05	52.00	57.02	63.00	70.00	75.00	75.00	69.00	64.00	54.00	49.00
Rome	47.65	49.45	52.05	56.40	64.50	69.17	73.30	74.02	69.50	63.60	58.80	49.62
Nice	45.85	49.00	51.45	57.00	63.00	69.00	73.59	74.30	69.35	61.85	53.70	48.60
Florence	41.00	45.00	48.00	56.00	64.00	69.00	77.00	76.00	70.00	59.00	53.00	47.00
Avignon	42.00	43.50	50.50	55.00	66.00	72.00	76.00	76.00	67.00	60.00	50.00	43.30
Montpelier	42.00	45.00	47.00	53.00	60.00	67.00	72.00	75.00	71.00	61.00	52.00	46.00
Pau	41.20	43.60	48.80	51.80	61.60	68.20	70.60	73.40	67.40	58.20	46.60	42.80

TEMPERATURE AT AIKEN, SOUTH CAROLINA, TAKEN AT 9 A.M., 12 M., AND 3½ P.M., FOR DECEMBER, 1870.

Average temperature.....45°
" difference of wet and dry bulb..... 4°
Maximum .....61°
Minimum .....18°
Bright sunshine .....15 days.
Sunshine and clouds..... 6 "
Cloudy all day .....10 "

Total.....31 days.

Rain on four of the above cloudy days.
Snow on one of the above cloudy days.
Strong wind, eight days.

JANUARY, 1871.

Average temperature .....55°
" difference of wet and dry bulb..... 6°
Maximum .....69°
Minimum .....33°
Bright sunshine .....14 days.
Sunshine and clouds ....10 "
Cloudy all day ..... 7 "

Total.....31 days.

Rain on three of the above cloudy days.
Strong wind, eight days.

TAKEN AT 9 A.M., 12 M., AND 5 P.M., FOR FEBRUARY, 1871.

Average temperature .....57¾°
" difference of wet and dry bulb..... 5°
Maximum .....80°
Minimum .....38°
Bright sunshine .....12 days.
Sunshine and clouds .... 6 "
Cloudy all day .....10 "

Total.....28 days.

Rain on seven of the above cloudy days
Strong wind, sixteen days.

MARCH, 1871.

Average temperature .....65°
" difference of wet and dry bulb.....7½°
Maximum .....85°
Minimum .....43°
Bright sunshine .....17 days.
Sunshine and clouds .... 5 "
Cloudy all day ..... 9 "

Total.....31 days.

Rain on six of the above cloudy days.
Strong wind, ten days.

TEMPERATURE AT SAN BERNARDINO, CALIFORNIA, TAKEN AT 9 A.M., 12 M., AND 5 P.M., NOVEMBER, 1871.

WET BULB.	DRY BULB.	DIFFERENCE.	WIND.	REMARKS.	DATE.
53°	70°	17°	S. Light.	Bright sunshine.	Nov. 8, 1871.
50	62	12	S.E. "	" "	" 9, "
54	67	13	S.E. Very light.	" "	" 10, "
50	54	4	E. " "	Clouds and rain from 1 P.M. till 8 P.M.	" 11, "
56	68	12	S. Light.	Bright sunshine.	" 12, "
50	63	13	S.W. Light.	" "	" 13, "
52	64	12	S.W. "	" "	" 14, "
50	64	14	S. Very light.	" "	" 15, "
52	66	14	S. " "	" "	" 16, "
50	67	11	W. Light.	" "	" 17, "
50	64	14	W. "	" "	" 18, "
57	65	8	S.W. Very light.	" "	" 19, "
55	68	13	N. Strong.	" "	" 20, "
51	68	17	S. Light.	" "	" 21, "
61	78	17	N.E. Strong.	" "	" 22, "
57	70	13	S. Light.	" "	" 23, "
55	65	10	S. "	" "	" 24, "
56	60	4	S. "	Sunshine and clouds, a light shower fifteen minutes, and rain at night.	" 25, "
57	61	4	W. Strong.	Cloudy and rain from 3 P.M.	" 26, "
56	60	4	W. Light.	Showery until 1 P.M., then sunshine.	" 27, "
50	56	6	W. Very light.	Sunshine and clouds.	" 28, "
50	56	6	N. Light.	" "	" 29, "
46	59	13	N. Strong.	Bright sunshine.	" 30, "

251=11°. Difference between wet and dry bulb.
1469=64°. Average temperature.
Maximum, 79°; minimum, 45°.

DECEMBER, 1871.

48	61	13	N. Very light.	Bright sunshine.	Dec. 1, 1871.
48	58	10	S. " "	" "	" 2, "
52	62	10	N.E. Very light.	" "	" 3, "
52	67	15	N. " "	" "	" 4, "
55	71	16	N.W. Light.	" "	" 5, "
57	69	12	S.W. Very light.	" "	" 6, "
52	67	15	N.W. Strong.	" "	" 7, "
51	67	16	S. Light.	" "	" 8, "
51	67	16	N.W. Light.	" "	" 9, "
50	64	14	N.W. "	" "	" 10, "
51	68	17	N. Light.	" "	" 11, "
49	63	14	N.E. Very strong.	" "	" 12, "
51	67	16	N.E. Strong.	" "	" 13, "
52	63	11	N.E. Very light.	Sunshine and clouds.	" 14, "
53	67	14	S. Very light.	Bright sunshine.	" 15, "
53	58	5	S. " "	Sunshine and clouds, and rain at night.	" 16, "
53	55	2	E. Light.	Sunshine and clouds.	" 17, "
55	65	10	S. Very light.	Bright sunshine.	" 18, "

DECEMBER—*Continued.*

WET BULB.	DRY BULB.	DIFFERENCE.	WIND.	REMARKS.	DATE.
54°	63°	9°	S. Very light.	Bright sunshine.	Dec. 19, 1871.
55	66	11	S. " "	" "	" 20, "
54	56	2	S. Strong.	Rain all day.	" 21, "
48	52	4	E. Light.	Sunshine and clouds.	" 22, "
49	51	2	S. "	Rain until 3 P.M.	" 23, "
54	54	0	S. Very light.	Rain all day.	" 24, "
55	58	3	S. " "	Sunshine and clouds.	" 25, "
54	59	4	S. " "	" "	" 26, "
52	56	4	S. " "	" "	" 27, "
56	57	1	S. Strong.	Rain until 1 P.M.	" 28, "
55	57	2	S. Very light.	Cloudy all day.	" 29, "
53	56	3	S. " "	Sunshine and clouds.	" 30, "
56	57	1	N.E. " "	Rain all day.	" 31, "

272=8⅔°. Difference between wet and dry bulb.
1899=61¾°. Average temperature.
Maximum, 80°; minimum, 43°.

JANUARY, 1872.

51	53	2	S. Very light.	Cloudy most of the day.	Jan. 1, 1872.
51	55	4	W. " "	Bright sunshine.	" 2, "
51	56	5	S. " "	Sunshine and clouds.	" 3, "
48	57	9	N. Strong.	Bright sunshine.	" 4, "
49	56	7	N. Light.	" "	" 5, "
52	59	7	N.E. Light.	Sunshine and clouds.	" 6, "
50	56	6	S. Light.	" "	" 7, "
49	58	7	S. "	Cloudy all day.	" 8, "
53	56	3	N. Strong.	Rain all day.	" 9, "
55	59	4	N. Light.	Sunshine and clouds.	" 10, "
53	60	7	N. Strong.	Bright sunshine.	" 11, "
54	60	6	S.W. Light.	" "	" 12, "
53	61	8	S.W. "	" "	" 13, "
58	65	7	S.W. Very light.	" "	" 14, "
58	65	7	S.W. " "	" "	" 15, "
58	65	7	S.W. " "	" "	" 16, "
54	62	8	N. Strong.	" "	" 17, "
56	63	7	N. Light.	" "	" 18, "
51	60	9	N. Very strong.	" "	" 19, "
54	60	6	N. Strong.	" "	" 20, "
52	61	9	S.W. Light.	" "	" 21, "
53	60	7	S.W. "	Cloudy all day.	" 22, "
51	59	8	S.W. "	Sunshine and clouds.	" 23, "
50	60	10	N. Very strong.	" "	" 24, "
49	59	10	N.E. Strong.	Bright sunshine.	" 25, "
44	53	9	S. Light.	" "	" 26, "
47	55	8	S. "	" "	" 27, "
49	56	7	S. "	" "	" 28, "
48	55	7	S. "	" "	" 29, "
49	56	7	S.W. "	" "	" 30, "
54	56	2	S. Very light.	Cloudy all day.	" 31, "

210=6¼°. Difference between wet and dry bulb.
1798=58°. Average temperature.
Maximum, 67°; minimum, 38°.

FEBRUARY, 1872.

WET BULB.	DRY BULB.	DIFFERENCE.	WIND.	REMARKS.	DATE.
51°	54°	3°	S. Very light.	Sunshine and clouds.	Feb. 1, 1872.
54	60	6	S. " "	Cloudy all day.	" 2, "
56	60	4	S. " "	Bright sunshine.	" 3, "
44	57	3	S. " "	Sunshine and clouds.	" 4, "
48	61	13	N. Strong.	Bright sunshine.	" 5, "
48	63	15	N.E. Very light.	" "	" 6, "
51	63	12	N. " "	" "	" 7, "
53	64	11	W. " "	" "	" 8, "
54	59	5	S.W. Light.	Sunshine and clouds.	" 9, "
55	64	9	S.W. Very light.	Bright sunshine.	" 10, "
55	61	6	S.W. Light.	" "	" 11, "
54	61	7	S.W. "	" "	" 12, "
53	66	13	N.E. "	" "	" 13, "
55	67	12	S.W. "	" "	" 14, "
55	67	12	S.W. Very light.	" "	" 15, "
57	68	11	S.W. Light.	" "	" 16, "
60	72	12	S.W. Very light.	" "	" 17, "
61	74	13	S.W. Light.	" "	" 18, "
55	67	12	N. Strong.	" "	" 19, "
56	74	18	N.W. Light.	" "	" 20, "
56	69	13	S.W. "	" "	" 21, "
51	53	2	S. "	Rain till 12 M., then sunshine and clouds.	" 22, "
53	60	7	S.W. "	Bright sunshine.	" 23, "
48	51	3	S.W. Strong.	Rain most of the day.	" 24, "
48	53	5	S.W. Light.	Sunshine and clouds.	" 25, "
50	56	6	S.W. "	Bright sunshine.	" 26, "
51	58	7	S.W. "	Sunshine and clouds.	" 27, "
46	52	6	S.W. "	" "	" 28, "
48	59	11	N. Strong.	Bright sunshine.	" 29, "

257=8⅞°. Difference between wet and dry bulb.
1793=62. Average temperature.
Maximum, 81°; minimum, 47°.

MARCH, 1872.

54	64	10	W. Light.	Bright sunshine.	Mar. 1, 1872.
55	67	12	W. Very light.	" "	" 2, "
59	71	12	E. " "	" "	" 3, "
61	71	10	W. " "	" "	" 4, "
55	59	4	W. Light.	Sunshine and clouds.	" 5, "
51	56	5	S.W. "	Bright sunshine.	" 6, "
56	63	7	W. "	" "	" 7, "
53	62	9	W. Strong.	" "	" 8, "
54	60	6	W. "	" "	" 9, "
61	70	9	S. Light.	" "	" 10, "
59	68	9	S.W. Very light.	" "	" 11, "
52	60	8	S.W. Light.	" "	" 12, "
52	62	10	N. "	" "	" 13, "
55	62	7	S. "	" "	" 14, "
64	69	5	S.W. "	" "	" 15, "
52	59	7	S.W. "	" "	" 16, "
52	64	12	W. Very light.	" "	" 17, "
63	70	7	S. Light.	" "	" 18, "

MARCH, 1872—*Continued.*

WET BULB.	DRY BULB.	DIFFERENCE.	WIND.	REMARKS.	DATE.
55°	61°	6°	S. Light.	Bright sunshine.	Mar. 19, 1872.
54	62	8	W. Very light.	" "	" 20, "
56	63	7	S.W. Light.	" "	" 21, "
57	62	5	S.E. Strong.	" "	" 22, "
56	63	7	S.W. "	Sunshine and clouds.	" 23, "
55	63	8	S. Light.	Bright sunshine.	" 24, "
57	64	7	N.W. Strong.	" "	" 25, "
58	66	8	W. Light.	" "	" 26, "
60	68	8	W. "	" "	" 27, "
55	62	7	W. "	" "	" 28, "
56	62	6	S.W. Very light.	" "	" 29, "
57	65	8	S.W. Light.	" "	" 30, "
57	67	10	W. Strong.	" "	" 31, "

244=7¼°. Difference between wet and dry bulb.
1985=64. Average temperature.
Maximum, 80°; minimum, 51°.

SANTA BARBARA.

I take the following table of mean temperature for the year from the *Santa Barbara Press:*

MONTHLY MEAN, 1870–1.

April,	average of	3	daily	observations	60.62°	Oct.,	average of 3 daily observations	65.96°
May,	"	"	"		62.35	Nov.,	" " "	61.22
June,	"	"	"		65.14	Dec.,	" " "	52.12
July,	"	"	"		71.49	Jan.,	" " "	54.51
Aug.,	"	"	"		72.12	Feb.,	" " "	53.35
Sept.,	"	"	"		68.08	March,	" " "	58.42

Average temperature for the year, 60.20°.

COLDEST DAY.	WARMEST DAY.
April 12th, 60°.	April 16th, 74°.
May 15th, 66°.	May 23d, 77°.
June 1st, 69°.	June 3d, 80°.
July 26th, 76°.	July 11th, 84°.
August 11th, 77°.	August 8th, 86°.
September 23d, 66°.	September 27th, 90°.
October 23d, 60°.	October 20th, 92°.
November 7th, 64°.	November 20th, 87°.
December 15th, 52°.	December 28th, 71°.
January 11th, 56°.	January 3d, 76°.
February 22d, 42°.	February 28th, 71°.
March 13th, 56°.	March 27th, 83°.

Coldest day in the year, February 22d, 42°.
Warmest day in the year, October 20th, 92°.
Variation, 50°.

APPENDIX B.

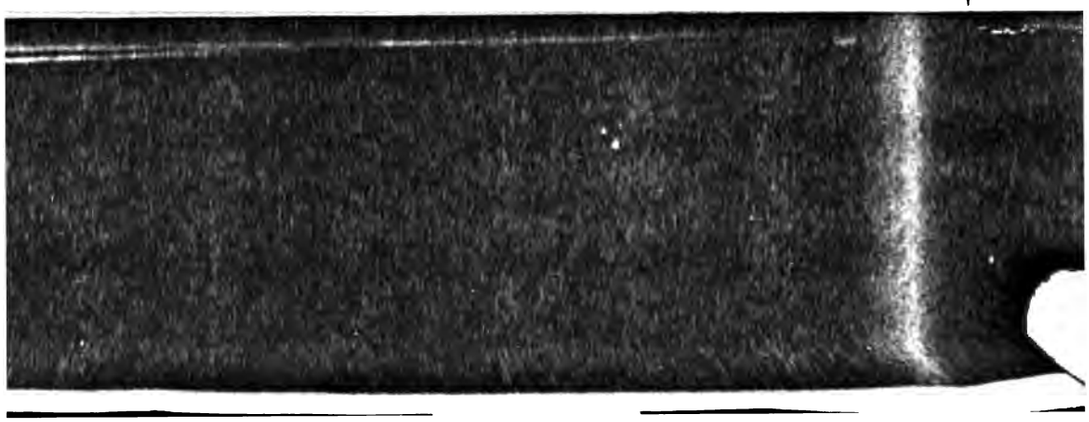
THE TIMBER REGION OF THE PENINSULA.

From the Ensenada "Lower Californian."

THE SAN PEDRO MARTIR PINE REGION.

From Col. D. K. Allen's notes in his report to the International Company, we are permitted to take the following figures relating to the pine region of San Pedro Martir:

Large trees per acre	25
Small " "	10
Average number of logs per tree	3
" diameter of each	2 ft. 9 in.
Length of logs	12 feet
Number of Norway pine per acre	17
" white " "	4
" fir-trees "	3
" red cedar "	1
Total	25
Number of dead trees per acre	3
" trees down "	2
Total number of Norway pine-trees	8,500,000
" white "	2,000,000
" fir-trees	1,500,000
" red cedar-trees	500,000
Total number of trees on San Pedro	12,500,000



Total number of logs on San Pedro	.....	37,500,000
"	feet of lumber	18,750,000,000
"	cords of wood (4 feet)	200,000,000
"	small trees	5,000,000

Average fall of snow, 4 to 8 feet.
" time it lies on ground, 4 to 20 weeks.
" rainfall in summer, 20 to 30 inches.

The above estimates of trees, logs, and lumber do not include the Ulalie section of San Pedro Martir, which has an area of about 100,000 acres.

The summer of 1887 had fifty-three rains, or thirty and a quarter inches of water. June had three inches, July seven inches, August eight inches, September twelve inches.

Colonel Allen spent seventy-six days on the above work, and travelled 1,510 miles.

It will pay to build a branch from the Yuma line up to the pines, although Colonel Allen says that it is practicable to dam the streams and float the logs, wood, and lumber down to where it is wanted, or to the points where the Coast Line Railroad will cross those streams. Colonel Allen followed every stream on San Pedro Martir from its mouth to its head, to the very uppermost spring, and therefore is well prepared to express an opinion on this subject.

The great mountain San Pedro Martir lies about 100 miles in a direct line south-east of Ensenada, 75 miles due east of San Quintin, and 30 miles west of the Gulf of California. The mountain proper is about 110 miles in length and from 15 to 30 wide. The range of which San Pedro is the king is about 160 miles long and 20 to 40 miles in width. We gather these facts from Col. D. K. Allen, Land Inspector for the International Company, who spent two and a half months in a careful examination of that region, and is probably the first white man, if not the only one, who has visited every section of that vast pine forest. Others have been there for a day or so, visited one

or two points, and then returned. Colonel Allen travelled over one thousand five hundred miles and examined nearly every portion of the country carefully and in detail, and from him we learn that the pine belt is from 60 to 75 miles in length and 15 to 25 miles in width—an area of nearly one million acres, one-half of which is covered with good pine.

Colonel Allen measured fifty-four acres, taken as an average of the entire region, in different sections, and found that the average number of trees to the acre was twenty-four large and eight small ones, the large ones averaging two feet in diameter, with three logs to the tree, each log being twelve feet in length. Two trees that had lately fallen were measured. One was 180 feet long, 8 feet in diameter at the butt, 50 feet to the first limb, where it was 5½ feet in diameter. The other tree was 201 feet in length, 8 feet 2 inches in diameter at the butt, 65 feet to the first limb, where it was 5 feet in diameter. Red cedar and fir trees were also found that measured 25 feet in circumference 18 inches from the ground.

The highest point reached was 12,800 feet. The Palomas reach an altitude 1200 to 1500 feet still higher. In many places the surface of the country was found to be as level as a prairie, the pasturage magnificent. The wild oats and rye, buffalo, bunch, and other varieties of grasses were knee-high to the mules. Deer, black and white tail, and mouse-deer, seen by the hundred; antelope abound on the mesas south, and mountain sheep near Rosarito in the south-west. Large streams of water abound everywhere, and springs were found at an altitude of 11,000 feet. It rained five times in June, fifteen in July, seventeen in August, and sixteen in September. A little over thirty inches of water fell in these rains.

Most of these rains were accompanied by thunder and lightning. Only four trees were found that had been struck by lightning during the present season, and seven the year before. One place was found where thirty-three trees on one acre had been struck by lightning. Brook trout were seen in two streams.

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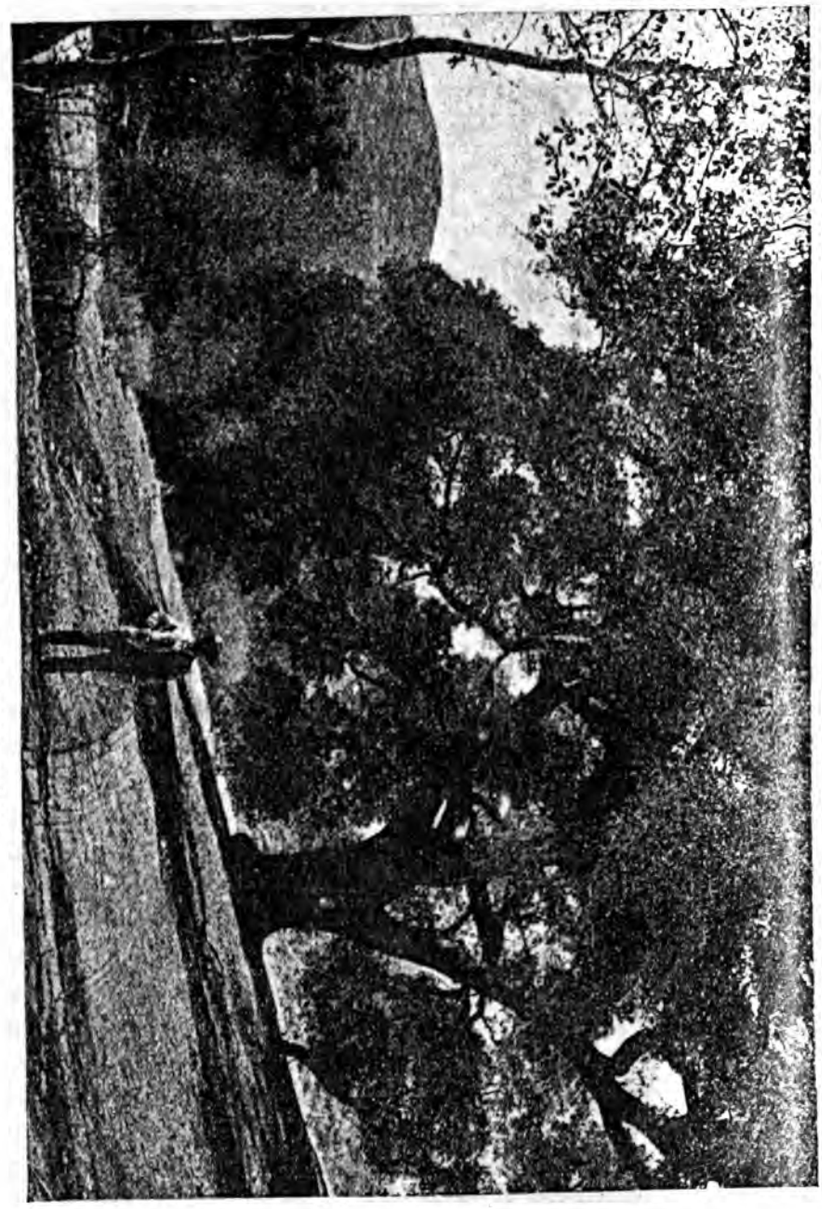


IN THE EASTERN END OF BUTRO CAÑON.

The following tree-measurements were carefully made:

FIRST ACRE.		SECOND ACRE.		THIRD ACRE.	
Trees.	Circumference.	Trees.	Circumference.	Trees.	Diameter.
1....	6 ft. 7 in.	1....	12 ft. 1 in.	1....	10 ft. 8 in.
2....	6 " 2 "	2....	11 " 9 "	2....	9 " 6 "
3....	8 " 6 "	3....	11 " 11 "	3....	8 " 8 "
4....	8 " 0 "	4....	5 " 1 "	4....	7 " 4 "
5....	10 " 1 "	5....	8 " 5 "	5....	8 " 8 "
6....	6 " 10 "	6....	10 " 10 "	6....	6 " 8 "
7....	6 " 8 "	7....	10 " 8 "	7....	9 " 8 "
8....	5 " 4 "	8....	8 " 4 "	8....	10 " 4 "
9....	12 " 6 "	9....	3 " 4 "	9....	9 " 2 "
10....	7 " 4 "	10....	6 " 9 "	10....	5 " 4 "
11....	12 " 11 "	11....	11 " 0 "	11....	9 " 9 "
12....	8 " 7 "	12....	11 " 0 "	12....	8 " 2 "
13....	7 " 10 "	13....	15 " 6 "	13....	9 " 9 "
14....	12 " 8 "	14....	5 " 3 "	14....	11 " 8 "
15....	8 " 11 "	15....	12 " 4 "	15....	17 " 9 "
16....	11 " 1 "	16....	11 " 6 "	16....	12 " 7 "
17....	10 " 2 "	17....	9 " 0 "		
Av. dia.	3 " 0 "	Av. dia.	3 " 3 "	Av. dia.	9 " 4 "

Averaging four logs to each tree.

The first two acres are yellow pine, the third white pine. Later on we shall give the measurement of cedar and spruce, also of a few acres of trees including the largest number of them.

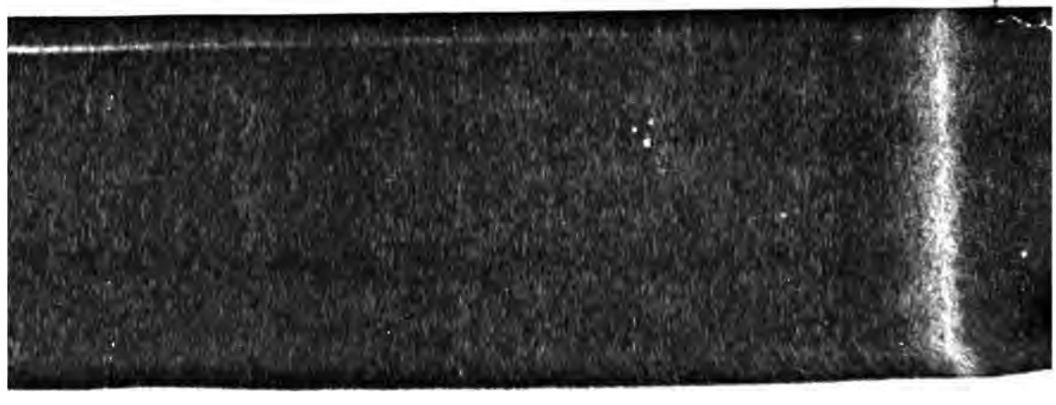
The railroad to Yuma will pass within thirty miles of the north end, the best portion of this fine belt of pine. Colonel Allen carefully looked over the route from San Matias Cañon and Valle Trinidad to the pines for a railroad. He says there are no difficulties in the first twenty miles, and that there will not be more than eight to ten miles of heavy work, and this not of the heaviest kind. He thinks there may be three to five miles of very heavy work. The San Rafael River has five branches, every one of which he followed from its source to the main stream, and he thinks that by building two or three small and inexpensive dams water enough can be stored to float all of these logs down to the upper San Rafael Valley, or to the point where the San Quintin wagon-road crosses the San Rafael at Dwarty's; that this same water can be taken from there to irrigate all of the north and south grand mesas—210,000 acres of splendid land.

APPENDIX C.

THE RECENT GOLD DISCOVERIES ON THE PENINSULA.

From the San Diego "Sun."

GOLD in considerable quantities has been received in this city from the placer mines of the Real del Castillo, Lower California, since the beginning of the rainy season. The gold found in the vicinity of the Real is coarse and of fine quality, valued at a little over twenty dollars per ounce. For years past gold has been taken out by Indians and others during rainy seasons or at times when there was standing water in the gulches. The most primitive means of mining were used, namely, the batia, or wooden pan, pick, and shovel. Wealthy syndicates from time to time endeavored to obtain a foothold and introduce modern appliances, but owing to the laws of Mexico then in force, a concession could not be obtained, so that those grand prospects were repeatedly abandoned. It was not until the laws were changed that an extensive mineral concession was obtained by T. Masac, under which the Lower California Mining Company was incorporated, with a capital stock of $5,000,000. The company is a home institution, and, backed as it is, will prove its faith by its works. Already a considerable amount of mining machinery has been purchased, and the determination expressed by its managers to have a plant of hydraulic giants at work before the close of the present year. Practical as well as scientific miners have reported favorably upon the property, so that an assurance of success is fairly guaranteed. There are, besides placers, many fine quartz gold-ledges which will be worked simultaneously, so that the outlook for the company is flattering.



From the Ensenada "Lower Californian."

DISTANCES TO THE GOLD-MINES.

From Ensenada to	Real del Castillo	30	miles
" "	Jacalitos *via* Real del Castillo	45	"
" "	Juarez " " and Jacalitos	75	"
" "	Camp Na'l " " " Hansons	75	"
" "	Socorro " " " Trinidad	160	"
" "	" " Santo Tomas and San Telmo	145	"
" "	Valledares *via* " " "	140	"
" "	" " Real del C. and V. Trinidad	165	"
" "	Rosarito " " " "	200	"
" "	Agua Dulce " " " "	250	"
" "	" " Santo Tomas and San Telmo	230	"
" "	San Quintin overland	161	"
" "	" by water	110	"
" "	San Telmo by land	100	"
" "	Valle Trinidad *via* Real del Castillo	110	"
" "	Santa Catarina " "	100	"
" San Quintin to	Socorro *via* Santo Domingo	75	"
" "	" " San Telmo	95	"
" "	Valledares *via* "	85	"
" "	" " Santo Domingo	65	"
" San Diego to	Real del Castillo overland	100	"
" "	Ensenada overland	110	"

There is plenty of water and feed for animals everywhere on the road. The longest stretch of road without water is from Real del Castillo to Sangre de Cristo, fifteen miles, and from San Quintin to Santo Domingo, twenty-seven miles. Three miles north of San Quintin there is water, but no wood.

Provisions can be obtained at Ensenada, Real del Castillo, and probably soon at San Quintin. Flour is worth $3.50 per sack of 48 lbs.; bacon, ham, and lard, 40 cents per lb.; beef, fresh, 12½ cents, dry jerked, 25 cents; coffee 40 cents, sugar 20 cents, tea $2 per lb.; baking-powder 62½ cents per lb.; potatoes 3 cents, onions 6 cents, beans 5 cents per lb., and everything else in proportion.

Mules are worth $70 to $75 each, burros $15 to $16 each, very

scarce—in fact, hardly to be had. Horses can be bought for from $40 to $60 each. These are the small native horses.

Teams with wagons can go to the Real del Castillo, Juarez, Campo Nacional, Santa Catarina, and to San José, above San Telmo; also within ten miles of Socorro and fifteen miles of Valledares, but cannot reach either Jacalitos, Socorro, Valledares, Rosarito, or Agua Dulce. Parties going to the mines should come provided with means to remain for not less than six months, funds sufficient for tools, provisions, animals, and for a complete outfit, so as not to be left in a new country without friends or cash—stranded on an unknown shore.

APPENDIX D.

THE MEXICAN TARIFF.

THE following articles are admitted duty free:

Acids, sulphuric, chloridic, and phenic.
Anchors, with or without their iron chains, for vessels.
Animals, alive, of all classes, except geldings.
Apparatus for extinguishing fires with six charges.
Arsenic, white.
Asbestos in powder.
Bags, made, ordinary, of jute, pita (thread made of the agave), henequen, and other analogous fibres for exporting fruits.
Barrels and pipes (casks) of wood, set up or knocked down.
Bars of steel, cylindrical or eight-sided, for mines.
Books and music, printed, in paper covers.
Boxes of common wood, set up or knocked down.
Bricks.
Cable or rope of aloe or hemp measuring up to three centimetres in diameter, or 94.2 millimetres in circumference.
Cable of iron or steel wire of all sizes.
Chlorate, bisulphate, sulphate, and trisulphate of lime.
Clay, sand, and blotting-sand.
Clocks for towers and public edifices.
Coaches and cars for railways of all systems.
Coal of all classes.
Cork in bulk or in sheets.
Crucibles of all materials and sizes.
Earth, refractory.
Eggs.
Emery in powder or in grain.
Feed, dry, in straw.

Fish, fresh.

Glycerine, not perfumed.

Gold, silver, and platina, in bullion or in dust.

Hoops of iron, with their rivets, for binding packages.

Hops.

Houses, complete, of wood and iron.

Hyposulphate of soda.

Iron and steel made into rails for railways.

Knives, ordinary cutlasses without sheaths (machetes), scythes, sickles, rakes, shovels, pickaxes, spades, hoes, and mattocks of iron or steel for agriculture.

Letters, plates, spaces, vignettes, type, and other tools for printing and lithographing.

Lime, common, hydraulic, and Roman cement.

Machines and apparatus of all classes, not specified, for industries, agriculture, mining, arts, and sciences, and their separate parts or pieces for repairs when imported with the machinery, or separately, and that are not comprehended in note 24 of section 2.

Masts for large or small vessels.

Mineral stone (ore and native metal).

Money, legal, of gold or silver, of all countries.

Oars for vessels.

Periodicals and catalogues, printed.

Plants and seeds for horticulture.

Ploughs and their shares.

Poison for preparing skins.

Pumice-stone.

Powder-wicking, fuses, and explosive mixtures for mines.

Precious stones.

Quicksilver.

Rags, pieces of paper, and pulps of all classes for the fabrication of paper.

Saltpetre, whether nitrate of potassa or of soda.

Slate for roofs from two to three millimetres in thickness.

Soda, caustic.

Steam-engines of all classes, locomotives, and other implements for the construction of railways of all systems.

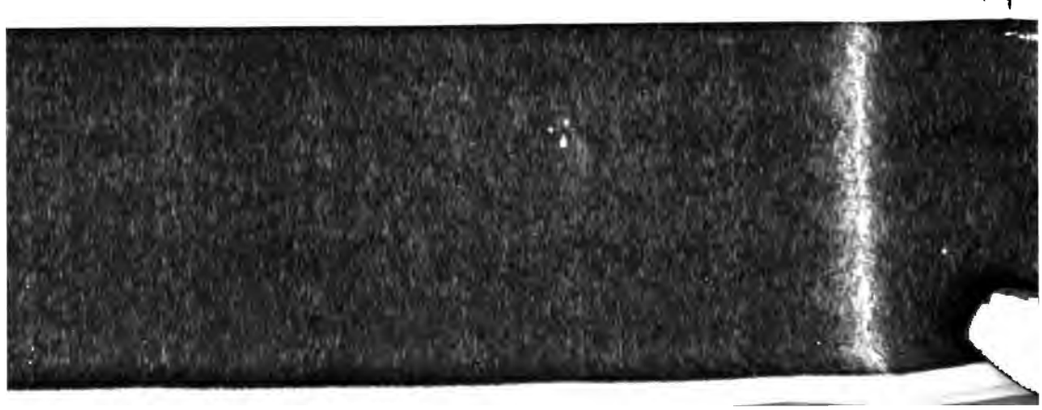
Sulphate of ammonia.

Sulphate of copper.

Tiles of clay, all classes.

Timber (lumber).

Tin in sheets up to forty centimetres in length by thirty in breadth, when not stamped or painted.



Tubing of iron or lead of all dimensions.

Vaccine matter.

Vessels of all classes, on their naturalization, sale, or introduction.

Whiting, Spanish.

Wire, copper, insulated with any material whatever, for electric lights, provided that the diameter of the wire itself be up to No. 6, Birmingham measure, and that its destination be proven by the interested parties.

Wire, iron, with hooks, for binding packages.

Wire, iron, barbed, for fencing, and the fasteners, provided they are imported with the same wire.

Wire for telegraphs and telephones, the destination of which shall be proven on importation by the interested parties.

Wood.

Besides the above, the following articles are allowed to enter duty free to colonists for their own consumption, but of course not for sale or traffic.

Coffee,	Butter,	Yeast powder,	Cheese,
Sugar,	Carpets,	Dried fruit,	Potatoes,
Rice,	Wagons,	Condiments,	Harness,
Ham,	Common furniture,	Cooking utensils,	Doors, windows,
Bacon,	Animals,	Coal oil,	nails, paint, hard-
Flour,	Lard,	Household goods,	ware for building.

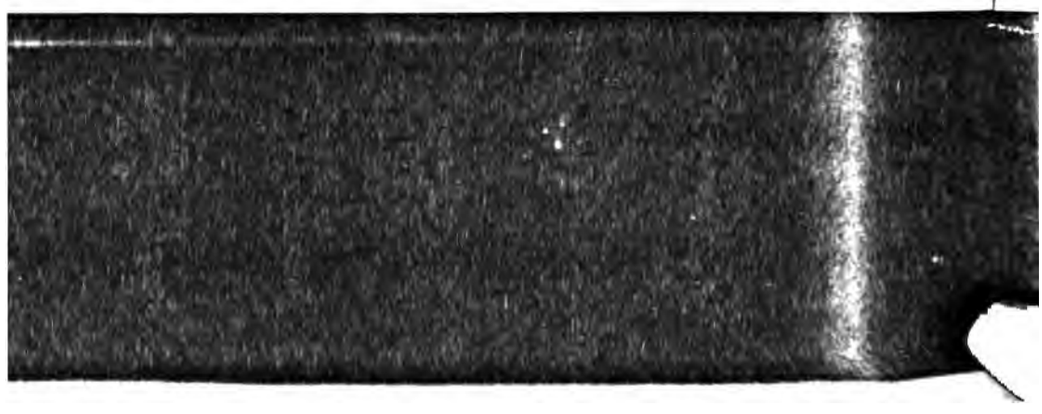
Thus it will be seen that the colonists in the Peninsula may bring in, either under the general free list or under the special colonial list, all that they need to establish themselves and to maintain themselves until they are well settled: houses, furniture, tools and implements, provisions, animals, wood for fencing and other purposes—in fact, whatever a farmer or settler would need in a new country, but no luxuries, such as pianos.

On the other hand, the duties on many articles imported into Mexico are high; and this has been already found an advantage to persons establishing themselves in manufactures in Lower California, as the whole market of the Mexican Republic is open to them for the sale of their manufactures, with a heavy tariff against foreign goods of like

character; and regular lines of steamers now connect Peninsular ports with the ports of continental Mexico.

Thus, under the Mexican tariff, flour, dried and preserved fruits, cheese, butter, pork and other meats, furniture and other manufactures of wood, carriages and wagons, harness, saddlery, shoes and other manufactures of leather, and many other articles of general consumption, pay high duties when imported.

THE END.



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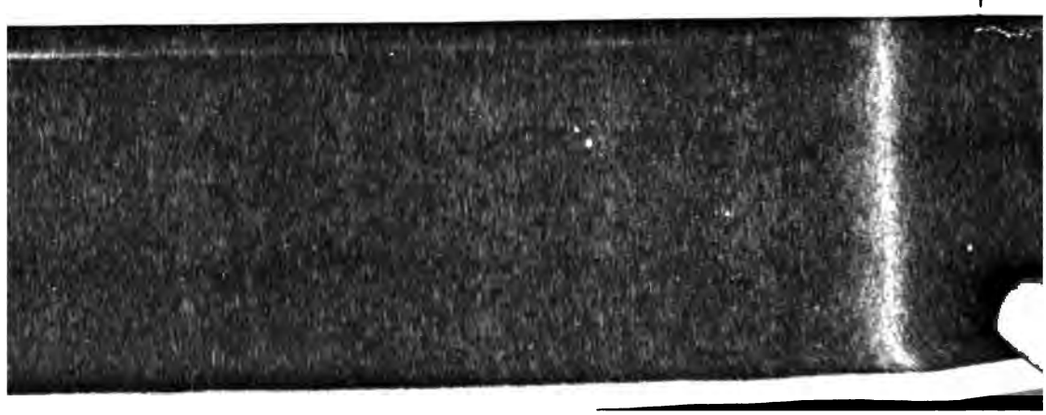

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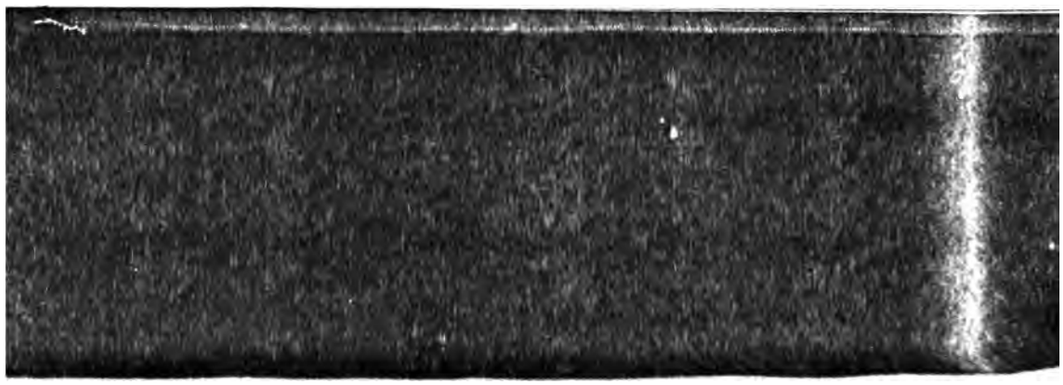

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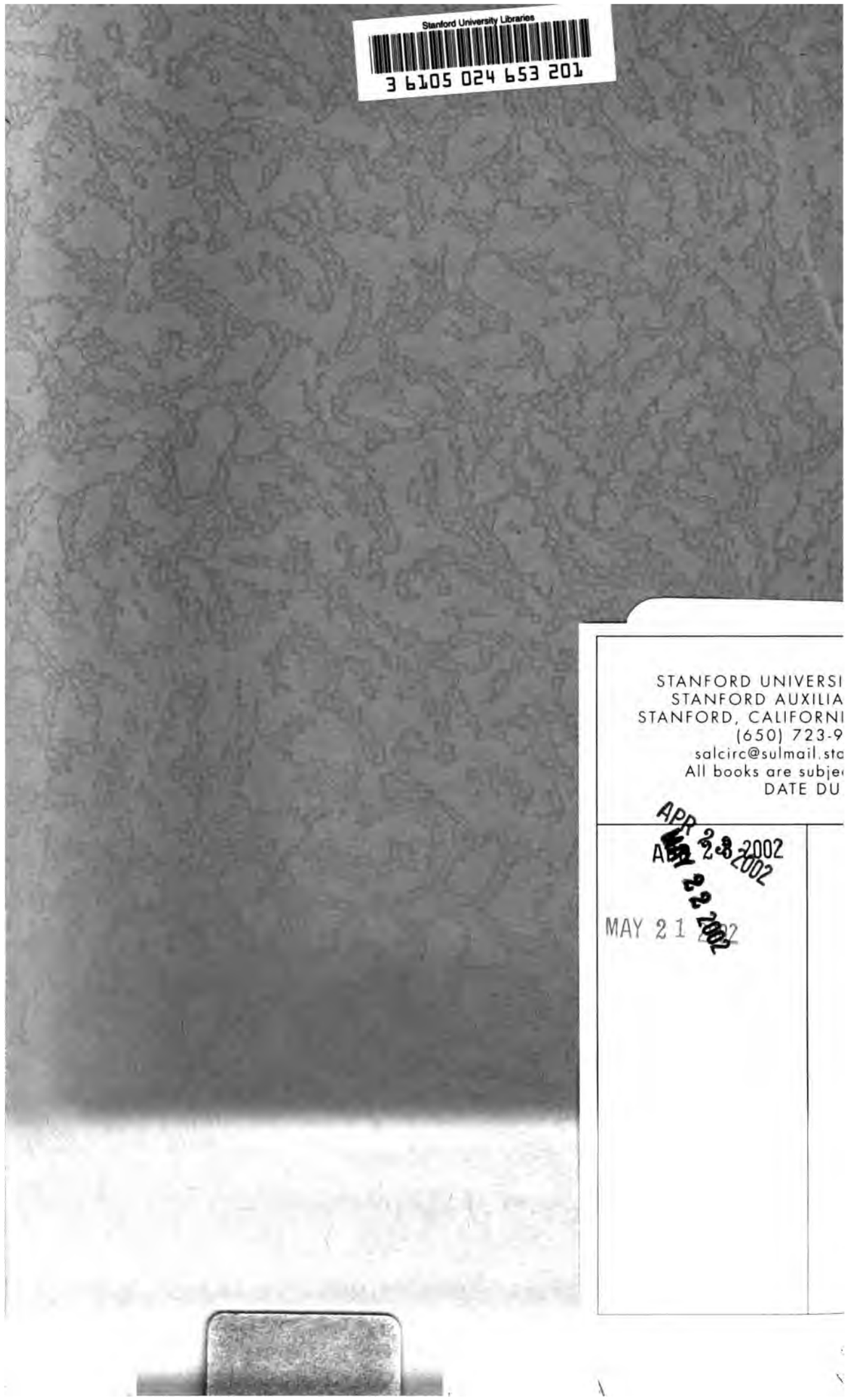

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